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MEETING EDUCATIONAL NEEDS FOR POST-HIGH SCHOOL AGE YOUTH AND ADULTS IN ALABAMA

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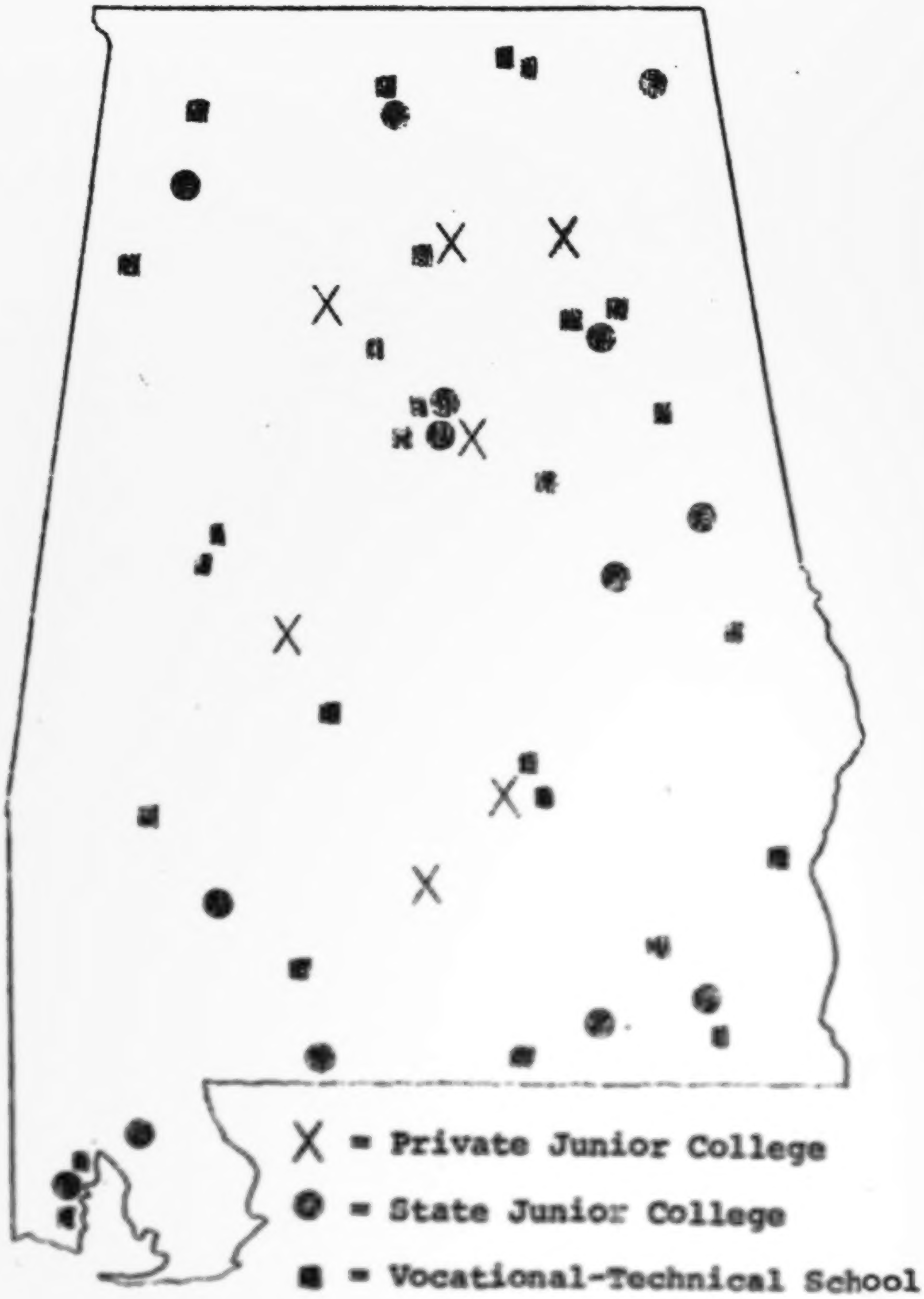
X = Private Junior College
● = State Junior College
■ = Vocational-Technical School

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U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
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MEETING EDUCATIONAL NEEDS FOR POST-HIGH SCHOOL AGE YOUTH AND ADULTS IN ALABAMA

A Report of Conferences
Held at Auburn University in 1964
On Vocational, Technical, and Junior College Education

School of Education
Auburn University
Auburn, Alabama

CONFERENCES HELD AT AUBURN UNIVERSITY IN 1964
ON VOCATIONAL, TECHNICAL, AND JUNIOR COLLEGE EDUCATION

"The Role of the Junior College in Contemporary American Life"

A Faculty Meeting of the
School of Education, Auburn University
January 31, 1964

"Current Developments in Vocational, Technical, and Junior College Education"

Annual Spring Conference of the
Alabama Association of School Administrators
April 26-27, 1964

"Meeting Educational Needs for Post-High School Age Youth and Adults"

A Conference Sponsored by the
School of Education, Auburn University
June 22-23, 1964

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INTRODUCTION

In the last few years there has been an increased interest in post high school education for youth and adults throughout the United States. The nation has been undergoing numerous economic, political, and social changes; these changes have had many implications and great effect on former patterns of higher education in the United States.

Today more jobs require educational training beyond the high school, while a person without this advanced training finds a smaller range of job opportunities available. To understand the rapidly occurring events in today's society, an enlightened citizen needs to continuously update his education. The rapid increase in the college age population following the "baby boom" of World War II has now reached the colleges and universities. In addition, a larger number and percentage of our teenage youth now graduate from high school. Many of these high school graduates are interested in continuing their education beyond the high school. Furthermore, an increasing number of adults are interested in returning to school part-time or full-time to gain additional learnings and skills in order to compete successfully in today's rapidly changing society.

The State of Alabama has also shared in these new developments. The opening enrollments in Alabama's colleges and universities during fall 1964 showed a 22.9 per cent increase over the previous year--the largest percentage increase of any state in the nation. To help meet the increasing need for additional educational opportunities beyond the high school in Alabama, a number of new educational institutions are being added to the state system including: (1) a new state university, the University of South Alabama, to be located at Mobile; (2) fifteen new vocational-technical (trade) schools which will more than double the number of these schools available in the state; and (3) thirteen new public junior colleges, whereas only one public junior college existed in Alabama in 1963. All of these institutions are expected to be in operation by fall 1965, with several of them starting during the 1964-65 school year.

In order to help the citizens and educators of Alabama prepare for this great expansion in post high school education for the youth and adults of the state, the School of Education at Auburn University sponsored a series of meetings and conferences related to this new program during 1964. Some noted authorities in junior college education in various sections of the country were invited to report on trends and developments in post high school education in other states. Many of the top officials in the State of Alabama who were involved in post high school education--particularly those involved with the vocational-technical (trade) schools and the junior colleges--participated in these conferences.

Most of the presentations by these speakers are included in this publication so that the reports can be made available to other persons interested in post high school education for youth and adults. These reports provide some excellent background information on the development of post high school education and should be helpful to all persons now involved in this tremendous educational movement in Alabama.

The School of Education at Auburn University plans to provide continuous assistance through its staff and other resources to help in the development of these new programs of post high school education for youth and adults in Alabama.

THE ROLE OF THE JUNIOR COLLEGE IN CONTEMPORARY AMERICAN LIFE*

B. Lamar Johnson
Professor of Higher Education and
Director of UCLA Junior College Leadership Program
University of California, Los Angeles

I propose in this presentation to state four propositions which are basic to the advancement of education in a democracy. Against the background of these propositions I shall then turn to the junior college and discuss six trends which will, I hope, lead to a fuller understanding of the role of the junior college in contemporary American life.

A. Four Propositions

It is axiomatic that education in a nation must emerge from the basic philosophy and other characteristics of the nation which it serves. With this in mind I should like to present four propositions which are centered around the kind of education we need in America.

Proposition 1: The ideal of democracy is to permit each individual to be educated to the level of his highest potential. This is of central importance, not only because of its value to the state and to society, but also and more particularly because democracy is committed to the overriding importance of every human personality. The development of the individual--each citizen and each citizen in preparation--is, and must be a goal, a value in and of itself, entirely apart from any contribution such achievement may make to the state as such.

Proposition 2: Individuals differ widely in their range and types of abilities. This proposition needs, I believe, no defense. The findings of psychology and the observations and experience of all of us confirm the fact of individual differences. Variations occur not only in results of the type that are measured by so-called intelligence tests, but also in such other types of aptitude--or as some would suggest "other types of intelligence" as mechanical, artistic, musical, clerical, and so on.

Studies which are being conducted in all parts of the world will lead to a fuller understanding of intelligence and aptitudes--what they are--some of their relationships--and particularly perhaps their implications for teaching and learning, for school organization and administration. In the meantime, on the basis of existing knowledge and insights we can and must proceed to act on our present understanding of individual differences.

---

*Address made to the faculty of the School of Education, Auburn University, Auburn, Alabama, January 31, 1964.

In this connection, Dr. G. H. Reavis, former Assistant Superintendent of Schools in Cincinnati, gives food for thought in his fable for school people entitled "The Animal School":

> Once upon a time, the animals decided they must do something heroic to meet the problems of a 'new world.' So they organized a school.
>
> They adopted an activity curriculum consisting of running, climbing, swimming, and flying. To make it easier to administer the curriculum, all the animals took all the subjects.
>
> The duck was excellent in swimming, in fact better than his instructor; but he made only passing grades in flying and was very poor in running. Since he was slow in running, he had to stay after school and also drop swimming in order to practice running. This was kept up until his web feet were badly worn and he was average in swimming. But average was acceptable in school, so nobody worried about that except the duck.
>
> The rabbit started at the top of the class in running, but had a nervous breakdown because of so much make-up work in swimming.
>
> The squirrel was excellent in climbing until he developed frustration in the flying class where his teacher made him start from the ground up instead of from the treetop down. He also developed charlie horses from over-exertion and then got 'C' in climbing and 'D' in running.
>
> The eagle was a problem child and was disciplined severely. In the climbing class he beat all the others to the top of the tree, but insisted on using his own way to get there.
>
> At the end of the year, an abnormal eel that could swim exceedingly well, and also run, climb, and fly a little, had the highest average and was valedictorian.
>
> The prairie dogs stayed out of school and fought the tax levy because the administration would not add digging and burrowing to the curriculum. They apprenticed their child to a badger and later joined the groundhogs and gophers to start a successful private school.

Proposition 3: A democracy must provide a wide range and diversity of education to meet the requirements of widely varied individuals. Someone has suggested that our task is and must be educating "all and each."

This includes the physician and the farmer, the housewife and the librarian, the secretary and the salesman, the musician and the lawyer, the mechanic and the businessman, the statesman and the teacher. Some learnings are, of course, common to all of these--and to the education of all citizens, the three R's for example, the common learnings. But the capacity of individuals to achieve these learnings, their rate of achievement, vary greatly and demand different approaches to teaching. This is not the place to discuss the varying approaches which are required or which may be used: different curricula within a single school or college, varying teaching within a single class, different institutions at given age levels, and grouping of pupils according to their achievement and/or interests.

Proposition 4: Variety in education and the ideal of educating everyone to the level of his highest potential are consistent with the demand for excellence in education. In discussing this proposition I should like to quote some lines which I wish I might have written but didn't. I quote from John Gardner:

> The sort of capacity measured by the conventional college aptitude test is very important, but instead of putting a more and more monolithic emphasis upon this sort of talent, we should encourage all kinds of individuals to run on all kinds of tracks . . . .
>
> . . . as things now stand the word excellence is all too often reserved for the dozen institutions which stand at the very zenith of our higher education in terms of faculty distinctions, selectivity of students, and difficulty of curriculum. In these terms, it is simply impossible to speak of a junior college, for example, as excellent. Yet sensible men can easily conceive of excellence in a junior college.
>
> The traditionalist might say, "Of course! Let Princeton create a junior college and one would have an institution of unquestionable excellence! That may be correct, but it leads us down precisely the wrong path. If Princeton Junior College were excellent in the sense that Princeton University is excellent, it might not be excellent in the most important way a community college can be excellent. It would simply be a truncated version of Princeton. A comparably meaningless result would be achieved if General Motors tried to add to its line of low-priced cars by marketing the front half of a Cadillac.
>
> We shall have to be more flexible than that in our conception of excellence. We must develop a point of view that permits each kind of institution to achieve excellence in terms of its own objectives.[1]
>
> . . . we must recognize that there may be excellence or shoddiness in every line of human endeavor. We must learn to

> honor excellence (indeed to *demand* it) in every socially accepted human activity, however humble the activity, and to scorn shoddiness, however exalted the activity. There may be excellent plumbers and incompetent plumbers, excellent philosophers and incompetent philosophers. An excellent plumber is infinitely more admirable than an incompetent philosopher. The society which scorns excellence in plumbing because plumbing is a humble activity and tolerates shoddiness in philosophy because it is an exalted activity will have neither good plumbing nor good philosophy. Neither its pipes nor its theories will hold water.[2]

If we accept the propositions which I have presented, the junior college clearly assumes a position of notable--and I might add crucial--importance in the life and development of our nation. This role will be clarified by an examination of junior college trends.

B. Junior College Trends

I suggest, therefore, that we turn to the consideration of six significant junior college trends and developments.

First, *the junior college is assuming sharply increased responsibility for preparing students for upper division work at universities and other senior institutions*. When junior colleges were first established, their single purpose was to offer two years of work acceptable to universities. At the second meeting of the American Association of Junior Colleges in 1922, the junior college was defined as "an institution offering two years of instruction of strictly collegiate grade." The goal was to prepare students for transfer, as advanced students. Even the term, *junior college*, implies the function to be served.

Joliet, Illinois, Junior College, founded in 1902 was the first public junior college to be established which is still in existence. It was started under an agreement whereby the University of Chicago accepted two years of work done by students at the extended high school in Joliet.

Although preparation for transfer is no longer the single purpose of the junior college, recent events highlight the importance of this objective. Studies reveal that the two year college prepares students for successful upper division work. It is, therefore, inevitable that as college and university enrollments skyrocket, the junior college will be expected to assume increasing responsibility for the freshman and sophomore years.

Studies at the University of California reveal that if students who were eligible to enter the University upon high school graduation elect to attend junior colleges and then transfer to the University, their grades during their junior and senior years will be just as high as those of students who entered the University as freshmen. In addition, many who at high school graduation were not qualified for entrance to the University attend junior colleges, transfer to the University, and make commendable records. It is considerations such as these that led to the recommendation in the Master Plan for Higher Education in California that in 1975 fifty thousand students who would ordinarily attend the University of California or state colleges be diverted to junior colleges. A start has already been made on the instrumentation of this recommendation.

In Florida next fall classes will open in a new and different kind of state university. Offerings at this institution will be limited to upper division, professional, and graduate work. The junior colleges of Florida will be assigned responsibility for the lower division preparation of students who attend Florida Atlantic University. But Florida is not content with a single "upper division university." The 1963 Florida Legislature has authorized and provided funds for establishing a second similar university in Pensacola.

Writing under the title, "Higher Education in the 21st Century" in the June, 1963, issue of *The Atlantic Monthly*, Alvin C. Eurich foresees that by the year 2000 strong liberal arts colleges and universities will have discontinued their first two years since these will come "almost wholly within the province of the junior colleges."

Second, the *junior college is recognized as a multi-purposed institution*. Despite its importance, preparation for transfer is by no means the only purpose of the junior college. It also has responsibility for occupational education, general education, and adult education.

Preparation of young people and adults for employment in positions which require post-high school education of less than four years looms as a particularly important need of society during the era of automation. Professor Norman C. Harris of the University of Michigan has recently pointed out the changing educational requirements of the labor force of our nation. He asserts that in 1930 an elementary education, or less, was adequate for fifty-eight per cent of the employed population and a high school education for an additional thirty-two per cent. In contrast he suggests that by 1970 fifty per cent of the labor force will be in positions which require post-high school education equivalent to graduation from junior college—and an additional eighteen per cent in positions which require at least a baccalaureate degree.

There is evidence that preparation for employment is, in all sections of the country, recognized as an important responsibility of the two-year college. In reporting a survey of curriculum developments in 116 junior colleges in the North Central Region of the country, President Isaac Beckes of Vincennes University states, "Those who have been calling for more comprehensive programs will find much for encouragement in reports from the 116 colleges." In his survey Beckes identified 191 new programs in occupational fields including twenty-five in electronic technology, twenty-four in data processing, eighteen in nursing, and six each in law enforcement, distributive education, and medical technology.

A recent publication (*Technical Education in the California Junior Colleges*) of the California State Department of Education lists 101 occupation-centered curricula in California two-year colleges—under such headings as agriculture, business and commerce, health, technical, and the arts.

In the fall of 1963 the W. K. Kellogg Foundation announced plans to make additional grants to junior colleges—this time to assist junior colleges develop and expand semi-professional education.[3]

In explaining the interests of the Foundation, Dr. Maurice F. Seay, Educational Director, referred to sharply expanding needs for workers in wholly new categories of employment—in "technician," "semi-professional," or "middle'level" occupations.

> In the decade of the '60's society is confronted with many and varied problems created by an explosive population and an economic growth unparalleled in history. One of the most serious problems is the acute shortage of skilled personnel in almost every field of endeavor. There are not only more people to consume services of all kinds, but as importantly there is more wealth to purchase these services. The level of consumption of such items as medical care—measured by the public's use of physician services and hospitals—goes up and up and up.
>
> Not only is there a greater effective demand, there also is a concurrent greater complexity of the product or service itself. In many professions the boundaries of knowledge have so expanded that the individual practitioner no longer can pretend to have complete knowledge of his field. This has inevitably led to specialization.
>
> These twin factors of greater demand and greater complexity have led in some fields to the development of wholly new categories of auxiliary workers—variously known as "technicians" or "semi-professional" or "middle level" personnel. These individuals have been utilized in ever-increasing ways to assume certain functions previously undertaken exclusively by the professional. Their employment has meant the conserving of professional manpower through delegation, and hence for provision of greater services to the public. It is the belief of many authorities that if the problems of (1) large-scale shortages of professional personnel, (2) increasing complexity of services and (3) ever-rising public demand for services are to be contained, these auxiliary or technical personnel categories must be vigorously exploited. It is also the conviction of many educators that the most appropriate institution for training of such personnel is the rapidly emerging junior community/college.
>
> Technological competence demanded by society is increasing at a rapid rate. Education is not keeping pace on a comparable scale. Changes in education, both quantitative and qualitative,

must be brought about at a rate heretofore considered virtually impossible. Accomplishment of these changes will require a candid re-evaluation of past efforts, and dynamic and vigorous new effort in institutions unfettered by tradition. Community colleges hold promise for rising to these challenges.

A productive citizen today may become unproductive tomorrow. Whole categories of employment opportunity will close overnight, to be replaced by new and more complex categories the next morning. These circumstances call for specialized education in many fields, at many levels, and this opportunity must be geographically and financially within the reach of all citizens on a lifetime basis. Coupled with these opportunities must be a source of professional guidance and advisement which permits each individual to assess his potential to attain maximum development. Community colleges can help provide the resources to do these jobs.

It is also clear that this nation must give immediate attention to a systematic program to prepare potential employees for gainful employment in an increasing number of fields. Every major study--national, state, and local--emphasizes the need for post-high school education for greatly increased numbers of young people. A majority of these studies conclude that a nationwide system of community colleges is the most promising means of accomplishing this goal.

Dr. Seay pointed out advantages the community junior college has in offering the post-high school education required for the preparation of such personnel:

1. It is accessible to students and potential students, for such colleges are being placed within commuting distances of students and potential students.

2. Its offerings are directly related to the requirements of employment. Junior colleges construct curriculums which embody recommendations of community advisory committees and reflect the requirements of positions to be filled.

3. Its program is flexible and responsive to change. Many courses, whether in daytime or evening programs, are replaced or modified when professional and vocational demands change.

4. It places major emphasis on guidance. Varied offerings, both transfer and occupationally oriented, permit most students to find fields in which they are interested and in which they may become proficient.

5. Its offerings are well-rounded, and include general education.

6. It is a strong and flourishing institution. The seven hundred existing junior colleges already provide a substantial nucleus of staff and facilities to which additional programs can be added with minimum expense.

Dr. Sexy also points out such obstacles to developing effective semi-professional and technical programs as:

1. It is difficult to recruit instructors for semi-professional and technical fields.

2. It is difficult to recruit students for these programs. Although numerous factors influence students against choosing to enroll in occupationally oriented programs, perhaps the major one involves that of the prestige associated with transfer programs.

3. The attitudes of a great many people--students, parents, higher education leaders, high school teachers and counselors, and even community college staff members must be changed if these new programs are to be successful. Some question whether semi-professional and technical curriculums are appropriate for higher education. Some critics believe a community college cannot maintain strong transfer programs and strong semi-professional and technical programs under the same roof. Although there is abundant evidence to refute these contentions, the support and advancement of semi-professional and technical curriculums will in large measure hinge on improving the image which many groups have of the varied programs of the comprehensive community college.

4. Vocationally oriented curriculums are costly. Programs which require extensive laboratories and work experience are much more expensive than most transfer offerings.

Because of the compelling need for semi-professional and technical education, because the junior college is particularly well qualified to provide programs in such fields, and because there are problems in developing such programs, the W. K. Kellogg Foundation will expand its interest in and grants for junior college semi-professional and technical programs. Accordingly, the Foundation is initially making one million dollars available for grants to junior colleges which submit proposals for developing plans and programs in semi-professional and technical fields.

Our trend is definitely toward the comprehensive junior college which includes in a single institution preparation for employment and education for transfer. In such a college, students may--when experience proves this is desirable--move from a vocational curriculum to a transfer program--or vice versa--without the necessity of changing colleges.

Third, the junior college is an 'open door' college. By this I mean that any high school graduate is eligible for admission to most junior colleges--and also, in California and several other states, anyone over eighteen years of age who can profit from instruction offered at the college.

Under the Master Plan for Higher Education in California, enrollment at the University is to be limited to those in the upper one-eighth of high school graduates and that at state colleges to the upper one-third. In other words, the junior college is to be the only avenue for higher education open to two-thirds of our California high school graduates.

In a recently completed national study of junior colleges with enrollments of more than four hundred, Schenz reports that eight out of ten colleges admit any high school graduate, and almost half of these admit anyone over eighteen who can profit from the instruction they offer.[4]

The fact that a student is admitted to a junior college does not, of course, imply that he is eligible to take all courses and curricula offered at the college. On the contrary, a number of programs are highly selective. Pasadena City College, for example, follows a policy of restrictive admission to its transfer offerings. Admission to programs in dental assisting, data processing, and registered nursing are typically restricted. Some colleges, Bakersfield, for example, provide special courses for students with low academic ability--and limit the study of such students to these offerings.

In his study, Schenz found that more than half (fifty-five per cent) of the colleges which he surveyed offered and frequently required special remedial courses.

In a recent trip during which I visited more than thirty colleges in twelve states, I was impressed with the serious attention two-year colleges all over the nation are giving to remedial instruction. I was also interested in observing a widespread interest in programmed instruction--and in particular, the use of such instruction in remedial courses. Delta College in Michigan makes extensive use of programmed materials in remedial courses in English, mathematics, and science. Delta also has, in a special room in its library, a collection of more than two hundred programs in a multiplicity of fields. At Delta, as at most other two-year colleges, emphasis is on the use of programmed texts rather than on the use of teaching machines. Delta does, however, have varied teaching machines available for use through its library.

Los Angeles Valley College has a study skills center where programs in remedial English and mathematics are available. Students are referred to the center, which is under the supervision of a faculty member, by their instructors. The study skills center at Valley College is being observed by officials of the Los Angeles College District as a likely prototype of a unit planned, on a larger scale, for inclusion in the learning center of the new junior college soon to be established in West Los Angeles.

I have described curriculum and instructional developments reported by a few colleges as they give realistic recognition to the fact that the public junior college is an open door college. It is difficult to defend the admission of all comers unless we provide offerings and counseling adapted to the requirements of our clientele. If we fail in this, the junior college in reality becomes a revolving door college.

Fourth, guidance is recognized as an important responsibility and, some would assert, goal of the junior college. The California Junior College Association included guidance as a purpose of the junior college in the list of goals which it prepared for use in the Restudy of Higher Education in California. In my own thinking guidance is a means to an end, rather than a goal in and of itself. Nevertheless, this is such an important responsibility—and is so recognized—that I single it out for special comment.

The need for guidance is highlighted by the fact that the junior college is, as we have noted, an open door college. In his book, The Open Door College, Burton Clark identifies what he called the "cooling-out function" of the junior college—a term which he has borrowed from the literature of gambling and of psychiatry.[5] Upon occasion the confidence man, after having fleeced his victim, has a responsibility for leading him to understand and accept the reality of the situation in which he finds himself—in other words, to come to a realization of the reality of his "fleecedness." This is designated as the "cooling-out role" of the confidence man.

Clark suggests that the junior college has a somewhat similar responsibility for leading many of its students to face the reality of their situations. They come to college with high ambitions or hopes to enter medicine, teaching, engineering, or law—fields for which they are eminently unqualified. The junior college has an obligation to help such students achieve a self-understanding on the basis of which they can make realistic educational plans.

The magnitude of this task is suggested by the fact that from two-thirds to three-fourths of the students who enter our junior colleges announce their intention to transfer to senior institutions, whereas less than one-third actually continue their education beyond junior college graduation. We have the paradoxical situation of students taking programs and working toward goals for which they are not qualified. Too often these students are wasting much of their time and energies, burdening their instructors, and retarding the progress of their classmates. This situation is particularly regretful because in a major number of cases students are qualified for other programs in their own colleges.

This problem does not, of course, have its roots in the junior college. Rather it emerges from a contemporary society which places its stamp of prestige upon a university degree. Parents cherish for their sons and daughters and young people for themselves the rewards of a prestige curriculum.

Nor is this problem unique to the United States. I find it literally in all parts of the world.

While visiting nation members of the British Commonwealth of Nations, I was repeatedly told that Great Britain has been so successful in building the prestige of its universities that a serious problem has been created. Countless young people are taking programs which lead only to a university, whereas their talents might appropriately be directed toward other fields of study--fields in which, in many cases, there is a pressing national demand for qualified workers.

In India, the British heritage of university training is attracting the enrollment of unprecedented numbers in university programs for which they are not qualified and in programs which have little relevance to the pressing needs of their poverty-stricken nation. I find similar situations in the Philippines, Thailand, Pakistan, Egypt, Southern Rhodesia, France, and Italy.

The difficulty which we face in enrolling junior college students in programs for which they are qualified is a national and, indeed, a world problem. In comprehensive junior colleges we have three advantages which I fail to find in most other parts of the world. First, we have a flexibility in our programs which makes it possible for students to transfer from one curriculum to another; second, we have a variety of offerings which are adapted to the qualifications of students with diverse types and ranges of aptitudes and achievements, and, third, we have testing, guidance, and counseling services through which expert assistance can be provided to students as the junior college performs its "cooling-out" function.

Fifth, it is our aim to locate junior colleges within commuting distance of all students. This is consistent with the recent recommendations of the Educational Policies Commission of the National Education Association that universal opportunity be given youth for two years of tuition-free education beyond high school--in non-selective colleges.[6] Writing from the "vantage point" of the year 2000 Alvin C. Burich, in his article to which I referred earlier, observes, ". . . a two-year college within commuting distance from home is now available for every young man and woman."

The goal, the realization of which Eurich anticipates at least by the turn of the century, was started, in 1960 by the President's Commission on National Goals which--in its report, Goals for Americans[7]--recommended that "there should be roughly within commuting distance of every high school graduate (except in sparsely settled regions) an institution that performs the . . . functions" of the junior college.

A great deal has already been done to move toward the achievement of this purpose. State surveys of higher education in all sections of the United States are recommending plans under which junior colleges will "cover" the respective states. In Massachusetts and Florida, for example, developments are well advanced on plans under which two-year colleges will by the 1970's be located within commuting distance of from ninety-five to ninety-nine per cent of the population. California now has junior colleges within such distance of eighty-five per cent of its population.

Sixth, the junior college is a community college. By this I mean that the offerings and programs of the junior college are planned to meet the needs of their communities--and also to elicit the participation of citizens in program planning, development, and operation. As a relatively new unit of our educational system, the two-year college is not handicapped by restrictions of the heavy hand of tradition. It can provide--in addition to education for transfer--curricula adapted to local requirements. This results in junior college programs in petroleum technology in the oil fields of Texas; in agriculture in the wheat fields of Kansas; in a medical secretary program at Rochester, Minnesota; in fashion design in the garment manufacturing center of New York City; in citriculture in Southern California; in insurance and banking in the financial center of Chicago; in forestry in Northern Idaho--and we might go on listing community-centered programs--as well as reporting the participation of lay citizens through advisory committees, for example in program planning and development.

Lay advisory committees are playing a notable role in the development of junior college programs particularly in vocational fields. Early this month as I was having lunch with a junior college president he turned to me and remarked, "This week I made a statement that I had never expected to make--as a college president. We had just finished a meeting with one of our advisory committees when an executive of one of our major banks came up to me and suggested the possibility that his bank could give us some money to help on a development. My response to him was, 'Bill, that would be all right, but that is not the important thing. We need your brains at ____________ College more than we need your money.'"

C. Conclusion

We have examined junior college trends against the background of four propositions relevant to the achievement of excellence in education in a democracy. As we appraise these propositions and evaluate these trends, it becomes perfectly clear that the role of the junior college is and must be of central importance to the welfare of our nation and its citizenry. Providing a diversity of programs for diversified students, providing counseling and guidance, located close to the homes of students, the junior college can and must make a major contribution to the goal of democracy: To permit each individual to be educated to the level of his highest potential. To this end may junior colleges be successful in communicating to each single student the words of Walt Whitman: "The whole theory of the universe is directed to one single individual--namely to you."

FOOTNOTES

[1] John W. Gardner. "Quality in Higher Education." Current Issues in Higher Education, 1958. Washington, D. C.: Association for Higher Education, 1958, p. 12.

[2] Ibid., p. 15.

[3] Information adopted from an address (via long distance telephone) by Maurice F. Seay, to the Advisory Council of the UCLA Junior College Leadership Program on November 20, 1963.

[4] Robert F. Schenz. An Investigation of Junior College Courses and Curricula for Students with Low Ability. Unpublished Doctor of Education Dissertation, University of California, Los Angeles, 1963, p. 44.

[5] Burton R. Clark. The Open Door College. New York: McGraw-Hill, 1960, pp. 160-165.

[6] Fred M. Hechinger. "Higher Education for U. S. Youth." New York Times. Western Edition, January 8, 1964, p. 8.

[7] Goals for Americans. The Report of the President's Commission on National Goals. New York: American Assembly, Columbia University, 1960, p. 91.

SOCIAL FORCES AFFECTING SCHOOL PROGRAMS FOR POST-HIGH SCHOOL AGE YOUTH AND ADULTS*

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In the early 1800's higher education certainly was the privilege of a few. Knowledge gained in the classical college, which was the only college in existence at that time, was the hallmark of respectability. The survivor of such a system was not anxious to question this training because it gave him status. In fact, the very nature of the training precluded the raising of any questions. Eddy in his book, Colleges for Our Land and Time, which deals with the land grant college movement, says that the term higher education does not really describe these early institutions. Most of the students entered in their early teens and were graduated at an age now considered close to minimum for a college freshman. Louis Agassiz characterized Harvard College in the 1850's as "a respectable high school where they taught the dregs of learning." The college was designed to preserve and to transmit tradition. Professor Becker commented "Rarely troubled by doubt and always disposed to rely on recognized authority, their chief distinction was to know and enforce all the right answers rather than to know or to ask any of the right questions." "I would rather have ten separate opinions and nine of them wrong," Professor Taylor of Yale was accustomed to saying, "than to be like my brother Gibb with none of the ten settled."

But forces were at work throughout the land which would lead to the establishment of a new type of collegiate educational institution. The free school movement had begun with the conviction that education was an obligation of the state. Educational opportunity was extended to include women. The American Lyceum movement began and became the fore-runner of college extension services of today; millions of people throughout the country came together to hear lectures on almost any conceivable topic, thus laying the ground work for our extensive program of adult education today. Industry was developing and with it came the demand for trained personnel and technicians. The shorter work week gave people more leisure time in which to pursue knowledge. Scientific methods were being applied to agriculture; although one hard shelled Georgia farmer rejected an invitation to attend a plowing demonstration by saying that he "already knew how to plow a hell of a lot better than he was doing."

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*Address made to the Conference on Meeting Educational Needs for Post-High School Age Youth and Adults, Auburn University, Auburn, Alabama, June 22, 1964.

The pressure rising from these forces forced some of the practical colleges into making at least halting overtures toward meeting the needs. Jonathan Baldwin Turner insisted that a new type of educational institution was needed, as he could not imagine a combination of the new with the old. He dismissed the attempt of the classical colleges to revise their curriculums by saying, "No wonder such educators have deemed the cultural liberal education of the industrial classes an impossibility for they have never tried or even conceived of any other way of educating them except that by which they are rendered totally unfit for their several callings in later life. How absurd it would be," he continued, "to set a clergyman to plowing and studying the effect of blight on growing of crops, in order to give him habits of thought and mental discipline for the pulpit. Yet this is not half as ridiculous in reality as the reverse absurdity of attempting to educate the man of work in unknown tongues, abstract problems and theory, and metaphysical figments and quibbles."

Out of these and other forces came the land grant colleges, founded on the conviction that the educationally underprivileged (which included, of course, all the classes but the clergy, the physicians, and the lawyer) should be given the opportunity to enjoy the benefits of higher education; that the common man had an inalienable right under our American system to improve his lot and his life through extended education. The land grant colleges developed and contributed numerous ideas and technique to our educational system. These institutions developed the laboratory as their teaching tool; extension services, a concern for the real and every day problems of people which became the basis for much of their research activity; and running under and through all of this was the conviction that higher education is the right of any person who can profit from it. Concomitant with this conviction was the idea that colleges existed to serve the people.

Many of the same forces which brought the land grant college into existence are still in operation and are forcing us to take a new look at our whole structure of higher education. First, one of the forces focusing attention on the need for a new type of educational institution is the tremendous increase in the number and percentage of young people knocking on the doors of colleges and universities. In 1955 the Fund for the Advancement of Education reported that during the 1930's births each year numbered between 2 million and 3 million. In the 1940's the annual rate rose to more than 3 million births and in 1954 more than 4 million births were recorded. The report concluded that whether the birth rate increases or levels off children already born will require a doubling of colleges and university facilities between 1955 and 1980. While these data are a little out of date, they serve to illustrate one very dramatic point; that is, on the basis of these data America must build as many college facilities between 1955 and 1980 as were built between the landing at Plymouth Rock and 1955.

Second, if we couple this increase in the number of births with the increased emphasis upon college attendance, by a greater percentage of young people who in the past terminated their education after high school, it seems reasonable to assume that a greatly expanded system of post-high school educational opportunity is needed. One way this needed expansion could take place would be to increase the size of our existing institutions, but this is probably only part of the answer. Some existing institutions do not wish to expand their facilities, others cannot do so. We have some evidence to support the idea that there is an optimum or desirable size for colleges and universities, and after a certain point the benefits are less than the costs of the program which are provided. An interesting statistic on this point is that in 1930 less than 30 per cent of our young people graduated from high school; the percentage now is about 65 per cent. In 1930 college degrees were awarded to 140,000 people. This year the number will be about one-half million. In the past 35 years the total price tag on education and training has approximately tripled and stands today at well over 600 billion dollars, or roughly $10,000 for every employed person. M. J. Rathbone, chairman of the board of the Standard Oil Company, in one of his addresses on Human Talent, the Great Investment, said, "The most important capital that any economy possesses is the skills which people carry around in their heads." He goes on to say that, "the significance of this truth can be easily understood if we imagine two countries, the first of which has only about 20 per cent of the people who can read and write with only one physician and one engineer for every 50,000 people and all of the other skills in similar proportions. Imagine also that this country, by some miracle, suddenly found itself with a physical plant equal to the United States: factories, power lines, super highways, and all the rest. Imagine next a second country, similar to the United States, went through the reverse program, losing all of its physical capital but keeping all of its advanced professional and technical skills. Let ten years pass and can anybody doubt that the country with the skills would come out with the higher learning standard?"

The third force which demands a new look at higher education relates to the basic purposes of education. The President's Commission on Higher Education in its report in 1947 which gave so much emphasis to studying higher educational facilities, particularly the community college, stated that "free and universal access to education in terms of the interest, ability, and need of the student must be a major goal in American education." The report said also that, "we have proclaimed our faith in education as a means of equalizing the conditions of men, but there is grave danger that our present policy will make it an instrument for creating the very in-equality that it was designed to prevent. If the ladder of educational opportunity rises high at the doors of some youth and scarcely rises at all at the doors of others, while at the same time formal education is made a prerequisite to occupations and social advance, then education may become the means not of eliminating race and class distinction but of deepening and solidifying them." The report, as you know, stated that the time had come to make education through the 14th grade available in the same way that high school education is now available and suggested that this expansion of educational opportunity should be tuition free.

The fourth force which I think is in operation today is the battle to make education through the high school essentially free and to consist of varied types of programs which are accessible to all youth. Certainly it is part of the American dream that young people should have the opportunity to go as far in education as their talents, desires, will, and strength of purpose will allow them to go. This concept is being extended today into the higher education level. A recent survey by Elmo Roper and reported in *Fortune Magazine* showed that 83 per cent of all of the people would want a son of theirs to go to college; 69 per cent wanted college for their daughters." Thornton has stated, "The American people are learning what the people of older cultures have learned, that the schools are the social elevators in a hardening social structure."

Another force which calls for the establishment of more diverse educational opportunities has been identified by Mike Brick in *Forum and Focus for the Junior College Movement* as the technological progress which has been made. He indicates that "American scientific advances and growing world responsibilities have created an unprecedented demand for college trained men and women. The American people have come to understand that national security depends fully as much upon human resources as upon existing productive capacity and natural resources. They have come to understand that men and women increase in value to themselves and to society when they are educated."

Rathbone stated, "I do not think that we as a nation have quite grasped the extent to which technological change has celerated in our time. It may take only a few years from the first discovery of a new phenomena, such as the superconductivity of metals at very low temperature, to the successful application of that phenomena in engineering. When you consider that some 90 per cent of the research scientists who ever lived are still alive today and that about half of the money spent for research and development in all the history of the United States was spent in the last eight years, you can be sure that this technological celleration is by no means an end." Earnest O. Melby, in a recent address before the National School Board Association in Houston, Texas, was quoted as saying that "in 1930 about one in four of the American work forces was engaged in unskilled labor. In 1960 only 1 in 16 was so engaged. In 1930 only 16 per cent of our workers were engaged in high level professions, technical and managerial work, while in 1960 this percentage was nearly 30."

Not only does our economy need skilled people to run machines and perform higher leveled tasks, we also need the wages which these skilled people will pour back into our economy. A doctoral student at the University of Florida recently studied the economic implications of establishing community junior colleges. He concluded that the typical male community college graduate earned about 60,000 dollars more over his life time of earnings than did the high school graduate. For the female it was about 45,000 dollars. With rapid technological advancements, it is essential that we study our post-high school educational structure today to determine what we are doing to prepare students for the world of work, and beyond putting in their hands skills which they will be able to use immediately in earning a living, what we are doing to develop within them an attitude toward adapting what they have learned to new demands. When it is remembered that about 70 per cent of the skilled trades in American manufacturing in 1900 do not exist today, it is safe to assume that a large proportion of today's skills will become obsolete in the next 25 or 30 years. A statistic from the Labor Department indicates that the average high school graduate of today will be employed in three different occupations before he finally finds one that he will pursue, and even that one undoubtedly will be modified. These predictions need not be too alarming, because of all animals man is the most adaptable. He is born into this world unspecialized; society trains him. We can prepare him to turn his energy, his mind, his hands to an infinite number of tasks. But I believe that flexibility and adaptability wither within man unless education deliberately sets out to nourish the ability to adapt. Rathbone said "before a student becomes a specialist of any kind he should first learn to understand what he reads, to think for himself and to express his thoughts clearly, to handle the basic tools of mathematics and their application to daily life, to grasp some of the reality of his natural and human environment. If a student has learned these things he will have learned how to learn. Such an education is like a master key that opens many doors, the man who has it need not fear becoming a prisoner of obsolete skills."

George Meany, president of the CIO-AFL, was quoted recently as having said, "It is a great misfortune that somewhere along the line many Americans have mislaid the old concept of the dignity of labor. Too few of our citizens realize that modern technology has increased rather than diminished the skills of the individual craftsman. Today's machinist is taught to work routinely with tolerances of a thousandth of an inch. The pipe fitter on a Polaris submarine must be able to keep allowable seepage down to one drop a year. Men who can perform at these levels deserve as much respect as the man who can prepare a legal brief." In a press conference, the last President Kennedy reported that automation has become such a factor in modern life that we are going to have to find 25,000 new jobs every week for the next 10 years for people in business and industry who have been displaced by machines. This state of affairs, he said, constitutes the major domestic challenge of our time.

Another social force which I think is still in operation is that the initial age at which the young person can go into business and industry is being steadily postponed. Earnest Melby said that 30 million young people will be added to the work force in the next 10 years. If current educational levels and accomplishments continue, 7½ million of these will be without a high school diploma and 2½ million will not have finished the 8th grade. Labor leaders indicated recently that the age at which a young man today can logically expect to enter industry at a reasonably good job is 22. This raises the question in my mind as to what we are going to do with these young people during those years between graduation from high school and the time when business and industry want them. If they are able to work at only part-time jobs, or low-skill jobs, what is this going to do to them, to their perception of themselves as people and to their pride? We cannot afford this waste of human resources. When working in Oregon with Dr. Leonard B. Koos on the study of post-high school educational facilities in that state, we studied the report of the Federal Bureau of Investigation, particularly those which reported the number of arrests for major crimes. We found that the number of these offenses committed by young people who were out of school and who were not working grew sharply during the 18-19-20 year old group. After 20 there was a sharp decline in the number of arrests suggesting that by that time some of the young people were either in business or industry, had married and begun to settle down and acquire property and families, or else they were in serious trouble and had been removed from society.

It has always seemed that as we raise the age at one end of our living scale—the age to which people will survive—we probably also inevitably increase the period of training which is required before we allow young people to assume their role as an adult. Baker Brownell, in *College and Community*, expressed it rather wittily when he talked about the custodial function of post-high school educational facilities, "Many educators and others are suggesting that college days be extended still further and that larger numbers of young people be included in them, thus removing even larger numbers of persons from productive life and thereby ameliorating the employment problem. The implications of such a suggestion are obvious: Create more parasites so that the hosts will have a fuller employment supporting them, thus it all gets busier as the fleas increase." James Thornton, in his book, *The Community Junior College*, said, "What we need are useful educational programs, both to prepare youth for employment and for higher quality of living and to occupy them wholesomely rather than destructively."

Another social force which is still in operation calling for a new type of program in higher educational institutions is the fact that many parents believe that their children are too immature to go away to colleges and universities and that what is really needed are higher educational institutions where the children live so that they can remain under the supervision and control of the parents for a longer period of time. This is particularly true, it seems, of parents of daughters. Supporting this belief is the fact that the cost of attending college away from home is one of the major deterents to college attendance by many of the young people. Many seemingly cannot find ways and means of financing four years of college away from where they live, but if local educational opportunity is available they can go there for two years and then more than likely find ways of financing the last two years. In a survey conducted in St. Louis recently the lack of finances was listed by 38 per cent of the seniors as their reason for not going to college.

Yet another force in operation which calls for a re-appraisal of existing educational institutions is the fact that many of our young people suddenly "blossom" after a rather mediocre high school record. For want of better terms these people are called "late bloomers"; they suddenly seem to grow up; their goals become clearer; life has more meaning and more purpose for them. Selective admission practices in college and universities seem to be disenfranchising a considerable number of young people. The kinds of programs available to "late bloomers" in post-high school educational facilities are also disenfranchising a considerable number of such people. As B. Lamar Johnson put it when discussing policies for the community colleges, "In many colleges today the open door policy is really a revolving door policy. We do not provide programs within our institutions to take care of what these young people need."

A recent item illustrates the matter of the "late bloomer" and the need for making available to him some kind of educational opportunity. When Thomas A. Edison was a boy, a teacher told him he was too stupid to learn anything. F. W. Woolworth got a job in a drygoods store when he was 21 but his employer would not let him wait on customers because he didn't have enough sense. A newspaper editor fired Walt Disney because he had no good ideas. Caruso's music teacher told him he could not sing, that he had no voice at all. The director of the imperial opera in Vienna told Madam Schumann-Heink that she would never be a singer and advised her to buy a sewing machine so that she could support herself. Leo Tolstoy flunked out of college. Admiral Richard E. Byrd had been retired from the navy as unfit for service until he flew over both poles. Emile Zola got a zero in literature in his university course. Louis Pastuer was rated mediocre in chemistry. Abe Lincoln entered the Blackhawk War a captain and came out a private. A literary critic once told Balzac that he might follow any profession he pleased except that of writing. Louisa Mae Alcott was told by an editor that she could never write anything that would have popular appeal. A famous London editor wrote "fraud, nonsense, trash and balderdash" across Browning's first batch of poems. Think what the world would have lost if the door of opportunity had been permanently closed to these people.

EMERGING PURPOSES AND PROGRAMS IN COMMUNITY EDUCATION*

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In order to understand and gain perspective of the emerging purposes and programs for community education in the United States, it is necessary to view education historically. When this is done, three trends stand out:

(1) The continual upward extension of educational opportunity.

(2) The creation of specialized institutions to serve a specific unfilled education need.

(3) The subsequent transformation of these specialized institutions into comprehensive institutions.

The operation of these trends can be demonstrated by giving a brief historical account of how they have operated at each level of education. As one views this process he cannot help but believe that there is at least an element of truth in the statement by the wag who said: "The one thing we learn from the study of history is that man hasn't learned anything from history."

THE ELEMENTARY SCHOOL

The earliest colonial schools were established for the sole purpose of promoting literacy which, in the Protestant tradition, was considered necessary for religious instruction. Almost immediately another purpose was added to this first one.[1] For example, in 1642 the Colonial Court of Massachusetts decreed that appointed town officials should fine parents who failed to teach their children to read and understand the principles of religion and capital laws. So to the initial purpose of religion for which these schools were created was very soon added that of citizenship needs.

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*Address made to the Spring Conference of the Alabama Association of School Administrators, Auburn University, Auburn, Alabama, April 26, 1964.

However, the colonies which were most closely aligned with England—especially those to the South—adopted the English pattern where public elementary schools were regarded as charitable institutions. Hence there developed public "Pauper Schools" for children of the poor and private "Latin-Grammar Schools" for children of the economically favored.[2]

Moreover, early public schools were exclusively for boys—a condition that did not change until well into the 1800's. Initially the extent of public education for girls was limited to short summer terms, noon hours, or other brief intervals when boys were not present. In addition to being made available to girls, the amount of elementary education has constantly been extended upward. The initial requirement was mere literacy. The requirement is now nowhere less than completion of the 8th grade or 14 years of age for all normal children, and in most states it is 16 years of age. (Recently some states have voided their compulsory attendance laws in an effort to forestall racial integration.)

In summary—the public elementary school in the process of emerging has:

a. Changed for a single to a multi-purpose institution.

b. Changed from an institution exclusively for boys, to separate schools for boys and girls, to co-educational.

c. Changed from an institution for the children of paupers to one committed to educating all the children of all the people.

d. Changed from no requirement as to length of attendance to at the very least completion of the eighth grade by all except the mentally deficient.

THE SECONDARY SCHOOL

The battle to provide an elementary education for all was essentially won by 1850. However, at the advent of the 19th century, education beyond this level for the most part was available only in private and semi-private schools which were financed by tuition. Furthermore, these institutions existed to serve a single purpose—preparation for college.

The academy emerged in the late 1700's as a new type of institution. It was a more comprehensive institution than existed previously. One of the main purposes expressed in the endowments creating the early academy was "the establishment of courses which would have value aside from the mere preparation for college."[3] There was emphasis on the study of English, mathematics, and science. As Cubberley puts it: "The study of real things rather than words about things, and useful things rather than subjects merely preparatory to college . . ."[4] This trend is, of course, reflected in the Age of Enlightenment upon which the Western World had embarked and a forerunner of the Scientific Era.

This transition was not without opposition. In 1817 the New York Regents deprived all academies of state aid that did not teach the classics and limited aid to students who were pursuing such classical studies. However, the protests were so loud that the legislature ordered the rule changed to permit "English studies."[5]

Repeating the pattern of the early elementary schools, girls were again excluded. This set the stage for the development of female academies and seminaries--particularly in the South which remained much closer to England in its educational traditions. For example, in Alabama, 27 academies for girls were established between 1822 and 1860. None of them exist in that form today.

Like the Latin Grammar Secondary School which had virtually disappeared from the educational scene by 1820, the Academy soon proved to be inadequate for the aspirations and needs of a developing democracy. The result was emergence of the American High School--the first truly American educational institution.

It came into being to provide locally and at public expense what had been initially provided privately--thus an extension of educational opportunity for the masses. This could be made no clearer than the statement by the School Committee for the Boston Secondary School Committee which in 1823 made the following statement regarding the aim of the first English High School:

> It was instituted in 1821, with the design of furnishing the young men of the city who are not intended for a collegiate course of study, and who have enjoyed the usual advantages of the other public schools, with the means of completing a good English education to fit them for active life or qualify them for eminence in private or public station.[6]

But this new American public institution almost immediately began serving also the college preparatory function. Hence it became a comprehensive institution of sorts. It was not, however, comprehensive in the sense that the term is used today. Little attention was given to vocational preparation in high school until the 20th Century. The groundwork for the comprehensive high school as we know it today was laid with publication in 1918 of that small but important document entitled Cardinal Principles of Secondary Education. That report prepared by a committee of the NEA listed seven main objectives of education and related them to four areas of human activities--(1) home, (2) vocation, (3) community, and (4) leisure. During the same period, in 1917, the first federal legislation was passed which provided direct aid to high schools. Those funds were for vocationally oriented programs and were made available with enactment of the Smith-Hughes Act. Subsequent federal legislation such as the George Reed Act, the George Ellzey Act, and the George Deen Act have extended and increased support for this purpose.

In the meantime, specialized schools of all sorts were established to provide the ever increasing need for vocational preparation. Most of these were privately operated for profit though publicly operated technical and vocational high schools also came into existence during this period. Whereas the technical high schools were in the large cities, agricultural high schools were established in rural areas.

A classic example of the specialized proprietary school which developed after 1850 was the business college. One of the most successful was the Bryant, Lusk, Stratton Business College established in Cleveland in 1852. By 1865 that group had established a chain of business schools that extended to 44 cities.

Mississippi offers an excellent example of a state where special agricultural high schools were established. That state in 1910 enacted legislation permitting counties to establish agricultural high schools. Subsequently 55 such schools were established. Only a few exist as agricultural schools today. They have either been transformed into comprehensive high schools or into junior colleges.

In summary--the secondary school has in the process of emerging:

a. Changed from a private institution for the economically privileged to a public institution serving all youth.

b. Changed from a separate institution for boys and girls to a coeducational institution.

c. Changed from a single purpose to a comprehensive institution offering both academic and vocational programs and courses.

POST-HIGH SCHOOL EDUCATION

Essentially the same early pattern was followed in the development of higher education as for secondary education. Initially it:

a. Was private and served only the economically privileged.

b. Served only boys with separate institutions for girls developing later.

c. Served a single purpose--the preparation of ministers.

Public institutions of higher learning played an insignificant role in America until after the Darthmouth College decision in 1819 which prevented states from transforming existing private colleges into public institutions without their consent. Alabama in 1831 was only the fifth state to open a public institution of higher learning. However, these early public colleges resembled their private predecessors in philosophy and program. Their curriculums were largely classical, strictly nonvocational in nature, and for men only.

As a result specialized colleges began to appear. In a sense, the establishment of West Point in 1802 to train surveyors for the United States Army represents the beginning of technical institutions in this country. Not until 1824, however, did an institution devoted strictly to applied science appear on the American scene; this was Rensselaer Polytechnic Institution--a private institution and an omen of things to come.

The election of Andrew Jackson as President of the United States in 1828 launched a new era in America. Among other things it meant that public higher education could no more remain aloof from the masses than had elementary and secondary education. The common man was to have his opportunity for education beyond high school, and no less significant for institutions of higher learning, education that would prepare him to better earn a living and develop a nation.

Existing institutions, as before, resisted the changes that were demanded. The eventual result was federal legislation in the form of the Morrill Act first passed in 1859, vetoed, passed again and signed into law in 1862.

This set the stage for the establishment of a second state institution of higher education in many states--a condition resulting from the fact that existing state colleges resisted being contaminated by the "practical arts." Hence, the establishment of the Alabama Technological Institute. Of course, the Alabama Technological Institute is now Auburn University--still serving the technological needs of the state but a comprehensive university in the true sense of the word.

Another example of the resistance of established colleges to broaden their functions is in the case of teacher preparation. However, the establishment of separate teacher-training institutions was also due in part to other factors; namely, the refusal to admit women to colleges with men, and the great need for elementary school teachers as this segment of education made available to the masses. As a consequence normal schools for women were established. In time they changed from one to two year institutions, then they became coeducational, then senior teachers' colleges, and finally in many instances comprehensive state colleges. That exact pattern ran its course here in Alabama.

Emergence of the two-year college

The most recent phase of this process has been emergence of the two-year college. That institution came into existence primarily as a result of an effort to remake American high education along the German pattern. It began in the 1880's as attempts were made to develop graduate education in this country and to standardize or upgrade higher education

The initial effort was to reassign the first two years of the traditional English four-year college to the high school. Actually California developed this pattern to a considerable degree by the late 1940's. However, it remains in only a few places today. One is Meridian, Mississippi, which is moving the 13th and 14th grades onto a new separate campus this coming September. The demise of that initial pattern was due to a refusal to give up the English pattern of educational organization rather to its being inherently unsound as Dr. Leonard Koos, its champion for 40 years, so effectively points out.

Weak private senior colleges consolicated their resources and reverted to two-year institutions during the period 1890-1910, when pressure was put on them to upgrade or get out of the business of higher education. However, these institutions, as well as the early public junior colleges, were like the grammar school 100 years previous. Their function was limited to preparation for further formal education--senior college transfer in this case. They avoided occupational programs like the plague!

During the period 1920-1945 the junior college evolved as a comprehensive institution. It provided at least a partial solution to two problems that confronted educators:

a. The lack of maturity on the part of many high school youth to pursue occupational training.

b. The difficulty of getting youth to enroll in specialized post-high school institutions. (This is doubtless due in part to a status factor but also in part to the frequency with which youth change their mind after beginning an educational program or are unable to successfully pursue their chosen educational goals.)

The period of 1943 to the present represents development of the "community college concept" in the junior college movement. The drop in regular enrollment and the need for training defense workers during World War II stimulated junior colleges to open their doors to the community--especially during the evening. The result was a new appreciation of the public junior college by the local population and an increased willingness to support it as a locally controlled institution serving a variety of post-high school educational needs.

Thus the concept of the community college has been fully developed--and more than ever before an "American dream" realized. As such, the comprehensive community college has emerged as an upward thrust of the comprehensive community high school--sensitive to all post-high school educational needs of the community. Specifically the programs provided are:

(1) General education programs--to assure that no student whether pursuing transfer or terminal curriculum is denied that aspect of education needed to be an effective

citizen and live a rich personal life.

(2) Transfer programs--to provide, at a cost all can bear, the first two years of four-year degree programs.

(3) Occupational programs--to provide employment preparation beyond that which can be successfully given in high school but which falls outside the scope of senior college interest. These programs range from short courses in such fields as air-conditioning and auto repair to X-ray and electronics technicians. As happened 100 years ago, the need for these applied programs is so acute that the federal government once again has stepped in with financial assistance.

(4) Adult education programs--to provide continuing education of all types for adults to enable them to better meet changing cultural, economic, and social conditions.

In summary the community junior college appears to have emerged as the most successful method of providing post-high school needs below the senior college level. Some of the reasons are:

a. Economic feasibility--of a single administrative structure and multiple use of facilities.

b. Opportunity afforded students, when it becomes advisable or necessary to alter educational goals, to change their goals without the necessity of transferring to another institution. (When such transfer is required, many youth simply do not complete the process and hence become educational drop-outs to the detriment of themselves and society.

c. Opportunity for faculty members who teach in occupational programs and those who teach in academic programs to complement one another and thereby provide a stronger instructional program.

d. Possibility of better libraries, laboratories, and other instructional resources needed in both occupational and academic programs, than where each type of educational need is provided in a different institution.

e. Permits grouping students in general education courses thus making for educational and financial efficiency plus promoting respect for students pursuing different educational goals.

FOOTNOTES

[1] E. P. Cubberley, _Public Education in the United States_, Houghton Mifflin Company, Cambridge, Mass., 1919, p. 17.

[2] _Ibid_., p. 24.

[3] _Ibid_., p. 249.

[4] _Ibid_.

[5] _Ibid_.

[6] _Ibid_., p. 255.

EMERGING PATTERNS OF ORGANIZING, ADMINISTERING, AND FINANCING COMMUNITY EDUCATION*

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I believe there are many types of institutions and many patterns of organization which are being followed in various states and that each pattern has its advantages and disadvantages. The author is personally committed to the community junior college, the comprehensive junior college, and it is that type of institution about which this presentation is made. The needs of Alabama can, of course, be considered along with other types of organizations and decisions can then be made on the basis of the evidence available as to which is best for Alabama.

Dr. A. J. Brumbaugh, in his very excellent report on guide lines for establishing junior colleges, expresses much the same thought in better fashion. He writes that, "Because conditions will vary from one state to another and from one community to another, it is neither feasible nor possible to draw up a detailed set of criteria or guide lines that are rigidly applicable to every situation. It is possible, however, to abstract certain general criteria for guide lines, stated or implied, from practices that prevail among various states." Brumbaugh has eight criteria, or guide lines, for establishing community colleges. Each criterion is stated below and followed by the author's own personal comments about each.

The first criterion identified by Brumbaugh is: The community must understand the special purpose of the community junior college. He goes on to say that "the first prerequisite for starting a junior college is the development of a clear concept of the kind of institutions contemplated. The community junior college should offer opportunities for post-high school education to all types who will not or cannot attend college away from home. There is conclusive evidence that the percentage of high school graduates who continue their education is much larger in communities where a junior college is located than in those where they are not." Experiences in Florida may be used to illustrate the importance of this criterion. Because of selective admission requirements, the University of Florida admits only the top 40 per cent on the basis of the 12th grade examinations given to all graduating seniors in Florida. Approximately 37 per cent of the high school graduates in that county go on to colleges and universities. In counties which have community junior colleges the percentage of young people who go on ranges upward from 57 per cent. In effect, because of selective admission requirements at the University and because the county does not have other types of post-high school educational facilities a considerable number of young people in the county are dis-enfranchised. A part of this 37 per cent who go to college go to nearby Central Florida Junior College. About 150 from this area drive about 40 miles (one-way) to go to junior college. In Marianna,Florida before Chipola Junior College was established, about 8 per cent of the high school graduates went on to colleges and universities somewhere. After the community college was in operation it was found that the 8 per cent still went away to colleges and universities outside the area that their father, mothers, and their aunts and uncles and friends had attended; however, an additional 40 per cent of the high school graduates in that area were attending the local junior college and that a large number of these later went to senior institutions.

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*Address made to the Spring Conference of the Alabama Association of School Administrators, Auburn University, Auburn, Alabama, April 27, 1964.

Brumbaugh goes on to say that whereas state colleges and universities, as a rule, provide educational opportunities primarily for the academically minded or bookish type of student, the community junior college will provide opportunities for students of many types, including those who are "mis-fits" in a strictly complete academic program.

The second criterion Brumbaugh identifies is: *The community must have valid need for educational opportunity beyond that already provided in the vicinity*. Potential enrollment is often used as an indication of need for a community junior college. Leonard B. Koos always used as a rule of thumb the estimate that one-third of the number enrolled in grades 9 through 12 would later enroll in a community junior college if it were essentially tuition free. This rule was found to be valid in Florida. It is generally believed that there is probably some minimum number of students below which it is undesirable and inefficient to operate a small college because of cost, limited curricular offerings, and limited extra-curricular experiences. In general, the community junior college should enroll some 300 full-time students as a minimum within a reasonable length of time.

Another indication of need is perhaps the type of community being considered. Is the community growing or is it a dying community? If the community is growing, one might take a calculated risk and start out with a small size institution, knowing that inevitably it is going to grow.

The third criterion that Brumbaugh identifies is: *There must be a favorable general attitude on the part of the people in the community for a two-year college*. He indicates that this may be appraised in several ways:

(1) In a vote of the people to establish a college,

(2) In a petition for a community junior college initiated by citizens or by the school board, or

(3) It might be judged by the support which the people have given to the lower schools in the area. Still further, such an attitude might be expressed by meetings, speeches, or interest on the part of civic groups or Chambers of Commerce, civic clubs, and other organizations.

The fourth criterion is: Adequate financial support of a permanent nature is essential to the establishment of a successful community junior college. The author believes that the community junior college should be tuition free with no subterfuge fees being charged. It should be free because we have found that even a modest tuition charge of $50 will spell the difference many times between a young person going on to college or not going. Support for this belief is also the mounting evidence that education is an investment. A recent doctoral study at the University of Florida revealed that the typical community junior college graduate earns $45,000 more over his life time than does a high school graduate. This seems to be rather good evidence that the junior college graduate man is going to pay a considerable amount of taxes on the additional money which he earns--which will more than repay the state for the investment they made in him. It is also firmly believed that there is little evidence to support the statement often made that tuition should be charged students so that they would appreciate more the education which they receive. It is doubtful that very many students pay their own tuition, rather it is more often paid by the fathers, mothers and guardians.

The fifth criterion is: Space for initial development and future growth should be available where a community junior college is contemplated. Again and again community junior colleges have been established on sites which at the time of establishment seemed to be more than ample, both for the present and also for the years to come. Later they found that the campuses were completely filled with buildings. The neighborhoods had built up and property costs were so high that acquisition of additional land was impractical. Such institutions must get by with what they have by limiting their program and limiting their enrollment. Others with similar problems may set up branch campuses as was done at St. Petersburg. For some years Florida used 40 acres as a minimum requirement for the community junior college. It is now agreed that this is too small; the state is now requiring more than double this amount--something like 100 acres as a minimum.

Criterion six is: A community junior college must be reasonably accessible for those for whom it is designed to serve. When the author was working with Dr. Koos in Oregon, it was found that the vast majority of junior college students came from within a radius of about 15 miles from the campus. Attendance falls off sharply when one goes beyond this area, varying, of course, with the type of driving required; i.e., it is much more difficult to travel 10 miles in the city than it is 25 miles in the open country.

Criterion seven states that: *The proximity of other higher institutions to the proposed community junior college must be considered in its establishment*. The assistance of other institutions should be considered also. Many believe that if a community can support a four-year institution it can also support, and undoubtedly needs, a community junior college whose purposes and curriculum are quire different from the usual four-year institution. Many private institutions have regarded the establishment of a public junior college, with little or no tuition, as a threat. Such resistance is probably unwarranted because it has been found that although enrollment in the private institutions fall off when the community junior college is established, after this initial decline they more than recover the number of students particularly in their junior and senior years which are usually the years the private institutions want to enlarge anyway. These are expensive years to operate with few students. It is to the advantage of the senior institutions to have a public junior college in the same community which they serve because not only do the junior colleges serve as a sieve to screen out young people who probably have no business going on to a senior institution, but they also serve as feeders for the senior institutions.

The last criterion of Brumbaugh's: *A decision to establish a community junior college should be made only after there has been a local survey, and, if possible, a state survey of educational needs and resources*. Both surveys are desirable. The state survey should be made first to give an overall picture of the state's needs in higher education, availability of resources to meet those needs, and the need perhaps for other types of institutions. The local survey should provide an intensive and serious look at the community, including such areas as the number of high school graduates, their intentions about higher education, the financial ability the community has to support their local colleges and the needs of business and industry in the area. Brumbaugh concludes this criterion by saying, "Careful statewide planning is the key to an effective system of higher education, a means of extending full opportunity for post-high school education to all who seek and can profit by it, the community college has an important role. To play their role effectively, community colleges must be established in conformity with predetermined guide lines. They cannot be scattered freely over the land in response to political winds or social pressure."

J. C. Messersmith of the Office of Education, in discussing the procedures and essentials of state wide planning, identifies some basic procedures which he thinks might be followed. First, there should be a legally established state agency for junior colleges with well defined authority and responsibilities. Secondly, there should be accurate and adequate long-range information. The role of the community junior colleges in the state system of higher education should be continually examined and re-examined. Third, there should be a clearcut and articulate definition of the function of the public comprehensive junior college. Fourth, all post-secondary institutions, public and private, should be included and involved. Fifth, other state agencies should be involved. Sixth, a scheduled priority should be established. Seventh, there should be a provision for continuity; that is, a continuing study should be made to see if existing institutions meet the needs. Eighth, we need adequate time and finance. He says unplanned operations are expensive ones. Planning can save much more than it costs. Planning also requires time.

The State of Iowa engaged in a very comprehensive study of education beyond the high school and published their findings in 1962. Among the recommendations made were:

1. The state should provide a legal framework for the establishment of a statewide system of area controlled public junior colleges.

2. The state board of public instruction should be designated as the state agency responsible for the orderly development and supervision of public community colleges.

3. The state board of public instruction should be authorized to establish an advisory committee on community college education, comprised of representatives of public and private two-year and four-year colleges and universities. Such a committee to be concerned with problems of integrating community college education with other aspects of higher education.

4. Public area-community colleges should operate comprehensive educational programs for persons of post-high school age by recognizing that there should be provisions for high school age pupils who have educational needs which cannot otherwise be met.

5. The educational offerings of the public area community colleges should be concerned with programs terminating after two years of study or less but some curricular offerings of a technical nature may require more than two years to complete.

6. Programs and services offered by individual public area community colleges should be determined by local surveys of the educational service needs of the area educational district with consideration also given to the needs of the state and the nation.

7. The total costs to individual attending public area community colleges should be kept at a level so as not to discourage students of low income families from attending.

The New York Board of Regents issued several statements about the role of the two-year college in the total structure of public education in that state. These statements support the general view that public two-year colleges should be comprehensive in the scope of offerings, aimed at broadening the base of educational opportunities for youth and adults and aimed to meet some of the state's needs for trained manpower. One of their reports says "The over-riding purpose of the comprehensive community college is to extend its educational opportunity at the immediate post-high school level by keeping cost to the students low, by bringing the college closer geographically to their home, and by offering broad and flexible programs of study. The report cites five specific educational functions as usually offered by a community public junior college: (1) general education, (2) college or university transfer education, (3) occupational or terminal education, (4) adult or continuing education, (5) guidance and counseling.

In his address Dr. Schultz cited some advantages of the comprehensive type of junior college. Some of these bear elaboration. Elimination of the cost of two or more administrative staffs or structures of services is an important consideration. The comprehensive junior college makes possible the elimination of duplication of courses and facilities. Different divisions of the institution can use the gymnasium, student lounges, and dining halls. Duplication of faculty in certain basis academic fields can be avoided. Larger class sizes are possible in basic and general courses, providing a reduction in unit cost of operation.

In discussing some of the advantages for offering a broad program within a single administrative structure, the New York Board of Regents cited the following: "It seems that there is a greater possibility for maintaining an open door policy on admissions, thereby broadening the base for educational opportunity available to the people of the state. Secondly, in the comprehensive type of institution there is likely to be greater effectiveness of guidance and counseling in a setting where the programs offered are sufficiently diverse in nature and in number to meet the needs of all students admitted and to facilitate changes from one program to another." It is true that in establishing junior colleges the tendency is to emphasize the college transfer program because it is easier to sell. Courses can be established more easily in some cases merely by securing a university catalog and copying the same course numbers and titles. It is also easier to get teachers for the college transfer program. It increases the pride of the community in the college because this is the kind of college they understand. While these things are important considerations, it should be a matter of serious concern that when a college begins to mature it often continues to emphasize the transfer program, even at the sacrifice of other program areas. Some junior colleges spend the majority of their time and energy on the minority of their student body. While they might have 75 to 80 per cent of their students enrolled in the university transfer program, the fact remains that probably only about 25 to 30 per cent of them graduate and go to a senior college. Should not institutions be just as proud to teach a youngster a marketable skill which would enable him to go out and earn 2½ dollars an hour where otherwise he might be earning only .90 cents an hour?

A great deal of thought is needed today about requiring general education for students in vocational and terminal and technical education. These students should also be cultured citizens; they need to know English, history, and have a deep appreciation for their country. On the other side of the coin, maybe the man who is going to become a surgeon should also have a little knowledge of auto-mechanics, for example. Perhaps the future professor of history could profit from some course in electricity.

A further point made by the Regents in favor of the comprehensive type of program is the opportunity for faculty members who teach in the occupational program to complement and supplement the work of those who teach in programs in liberal arts and in professional areas. It is possible to group students in general education courses needed by all into larger groups regardless of their major fields of study so that better understandings can develop among these students with respect to different personal interests and career plans so they get to understand one another better. These students are going to mingle in adult life; perhaps such a program can set the foundation to let them know each other better at a younger age.

In the comprehensive approach there is a better chance to build broader libraries, better laboratories, and other instructional resources because acquisitions and equipment for one field are often useful also for instruction in another; for example, in biology and physiology, x-ray technology, and nursing.

It seems to me that some further evidence of the need for the comprehensive community junior college and the desirability of starting out with that type of organization is that a technical institution or a vocational school in time finds that in order to meet the needs of their students satisfactorily they must begin to offer general education courses. Might it not be sounder to begin with the comprehensive institution?

PROGRAMS IN NORTH CAROLINA FOR POST-HIGH SCHOOL AGE YOUTH AND ADULTS*

Fred Eason
President of Isothermal Community College
North Carolina

The new program in North Carolina for post-high school age youth and adults has been in operation now for something less than a year. We are beginning to get an idea of some of the things that work and some of the things that do not work.

We are in a very particular situation in North Carolina, in that we have in the state 70,000 unemployed persons and something like 55,000 vacant jobs. Prospect of these jobs being filled any time soon are not good because people simply are not trained to take them. We have tried to offer some vocational programs and some literacy programs in our schools. However, we have not had enough programs and even some of those offered have been the wrong kind.

Although we have really known about this problem all the time, the first person who really did anything about it was Governor Sanford in 1961 when he appointed the Governor's Commission on Education Beyond the High School. The Commission was composed of twenty-six state leaders. They worked for a little over a year and reported one major recommendation which was to establish a system of comprehensive community colleges in North Carolina. At the time North Carolina either had in operation or on the drawing board twenty industrial education centers which offered mostly one-year vocational and trade courses. The recommendation of the Governor's Commission was to weld these centers into one institution. Such a combination has been difficult, but it is beginning to work out. At the present time North Carolina has two community colleges in existence, eleven technical institutions, and eight industrial education centers. The establishment of these institutions has been necessary to accommodate an increased number of high school graduates. In 1963 we graduated 48,600 students; in 1964 we graduated 54,000 students in high school; in 1965 we will graduate 62,000; and in 1966 we anticipate about 64,000 high school graduates. These graduates are the war babies--people who were born in 1946, 1947, and 1948. The University of North Carolina has grown from 7,000 in 1956, to almost 12,000 now. All the colleges in the state are bursting at the seams; there is nowhere else for them to go. For the first time this year we are turning away qualified students from the state university system. We have found that probably the only possible way to accommodate these people is through the comprehensive community college.

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*Address made to the Conference on Meeting Educational Needs for Post-High School Age Youth and Adults, Auburn University, Auburn, Alabama, June 22, 1964, while Dr. Eason was serving as Assistant Director of the Department of Curriculum Study and Research of the North Carolina State Board of Education.

Let us now take a look at what our idea is of a comprehensive community college. It is a multi-purpose drive-in institution with four major divisions (See Figure 1). The first type of institution, called an industrial education center, will offer two of these divisions. An industrial education center consists of one-year vocation and trades programs, plus general adult education, and community service programs. Now this is the simplest type of institution that we have. It is also one of the most expensive because of the heavy equipment used. The second type of institution is the technical institute. What we have done here is to take the industrial education center and add the two-year technician program. This program has about 12 to 18 hours of general education plus about 50 hours of vocational credits in the specific technical area in which the student wants to study. For the third type of institution we have added the two-year junior college transfer work, thereby forming the comprehensive community college. By law in North Carolina all community colleges have all of the programs described above: (1) vocational programs; (2) general adult education and community services, (3) technician programs, and (4) college parallel two-year academic programs.

There is no question of whether to have technical education or vocational education; this was taken care of by the legislature. North Carolina started with this pattern and with twenty institutions already in existence. Some of the institutions are converting to community colleges, some will stay industrial education centers, some will stay technical institutes for the time being. It is expected that eventually that all of these institutions except two will become community colleges. Probably two institutions will be abandoned. In summary a comprehensive community college in North Carolina is a four pronged institution; it has adult education and community service programs, one year vocations and trades, two year technical programs, and two year junior college programs.

Who may attend these institutions? Practically anybody; we have decided that the open-door policy is the only policy that we can follow. We have many college students who for various reasons need to live at home. We have high school graduates who would not normally enroll in college or in technical-trade school for any reason. We have the high school graduate who wants occupational information and doesn't know where to get it. Employed people, who want to go to night school, attend these institutions since they operate from eight O'clock in the morning to ten O'clock at night. The institutions have a director for day operations and an assistant director to run the night program. Enrolled also are married people who want to finish high school or married graduates who live at home and want to continue school. These institutions serve the drop-outs and also help in the upgrading of personnel in industry, supervisory training, and even in literacy training.

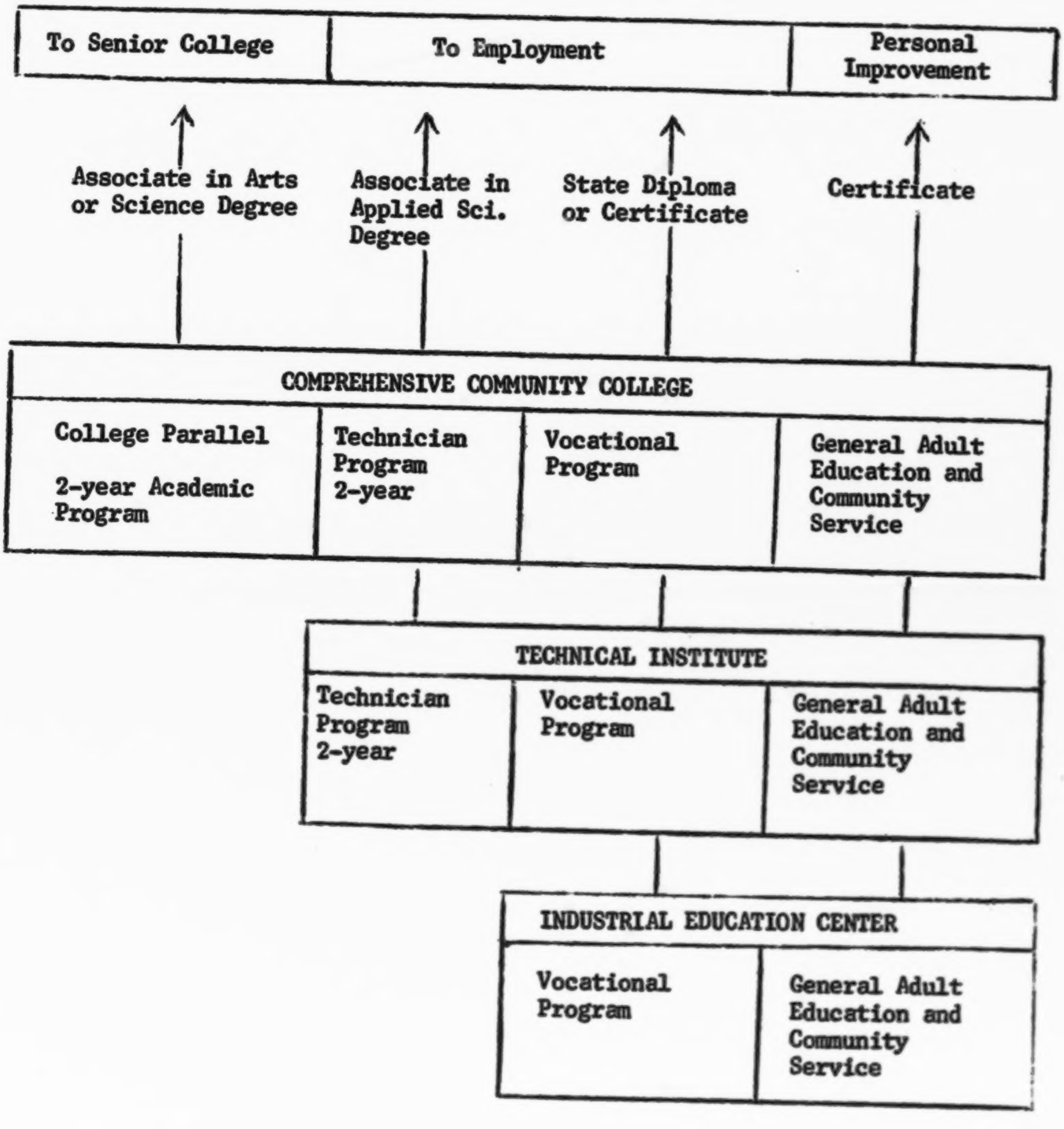
To Senior College
To Employment
Personal Improvement
Associate in Arts or Science Degree
Associate in Applied Sci. Degree
State Diploma or Certificate
Certificate
COMPREHENSIVE COMMUNITY COLLEGE
College Parallel
2-year Academic Program
Technician Program 2-year
Vocational Program
General Adult Education and Community Service
TECHNICAL INSTITUTE
Technician Program 2-year
Vocational Program
General Adult Education and Community Service
INDUSTRIAL EDUCATION CENTER
Vocational Program
General Adult Education and Community Service

FIGURE 1. PROGRAMS FOR THREE TYPES OF POST-HIGH SCHOOL IN NORTH CAROLINA

One of the state's best programs is the program in literacy training, which uses programmed learning, teaching machines, teachers, television, and anything and anyone else that is available. It is difficult to get adults who do not read and write to come in and admit that they cannot read and write. We have seven programs going now and more planned. We think that this is going to be one of our best programs. We started out thinking that a functional literate was one that did not have as much as a third grade education, than it was redefined to the fifth grade level, and the Army now sets the level at about eighth grade.

Many people who have almost no formal education are not functional literates and have the equivalent of a high school education. The reverse is also true. Many high school graduates are still functional illiterates. We have programs running now, approximately 347 different programs, in institutions which these persons may take,

As you may imagine, a comprehensive program such as this can get expensive. So far we have had good luck with the legislature; they have given us a relatively free hand. We have a requested budget for the next biennium of something over 40 million dollars.

How are these community colleges set up legally? They are basically community institutions supported by the state of North Carolina. The law, as written in the state department, specified that the community was to construct and maintain the building. The local community pays everything having to do with the school plant, maintenance, janitorial salaries, and insurance. The student pays $122, $120 tuition and $2 registration fee; the $2 is a nuisance fee to keep people from coming in off the street and registering for courses and never showing up again. The state picks up the rest of the bill entirely. This includes instructional material, teachers' salary, equipment, library books, library shelves, and other materials and equipment. In general the breakdown in costs is that the student usually pays about $120, the county pays about $100, and the state's share runs anywhere from $500 to $900, depending upon the size of the institution. One small institution cost about $1,300 a student last year, but as the size of the institution goes up student cost comes down.

The institutions are organized as colleges. They have boards of trustees, four of whom are appointed by local boards of education, four by the county commissioners, and four by the governor. Their appointments are for eight years, their duties are to run the college like the board of trustees of any college, having been given as much local autonomy as possible at the present time. However, in getting underway there is going to be some prescription from the state level, as is to be expected. The overall board of control is the State Board of Education. Under the State Board of Education there is a Department of Community Colleges, working in an advisory capacity with the various institutions. The State Board of Education does have two checks on the community colleges. First, the law states that the State Board of Education may make whatever rules and regulations it needs for the operation of the community college. Second, there is only one budget approved by the legislature; the budget is a central one which, if there is need, can be used as a financial control.

In order to establish a community college, the local community contacts the state department and someone from the department goes into the community to help them to conduct a survey to determine if the community can qualify for a college. The community puts forth its case, using criteria which will be discussed later. If the community qualifies, the State Board may approve the request, contingent upon adequate financing. The community will then have a bond election to secure funds for capital construction. The law states that the community must have a tax election on a special tax for continuing current expense support. The bond elections and tax elections generally have two sections, funds for capital outlay and funds for current expense. The state then allocates money for matching funds from the state level for capital construction up to one-half million dollars. Theoretically the state will put one-half million dollars in capital outlay into each of these technical institutes and community colleges. The state department did not ask for this provision, but the legislature saw fit to include it in the legislation.

The criteria for the establishment of community colleges are basically five in number. The first one is that there must be enough student potential in the area. We doubt that there should be a community college with fewer than 400 full-time college transfer students. Second, there must be an overwhelming community demand for the program. Third, there should be adequate financing. If a county is just barely struggling along, with sub-par public schools which are not accredited and always complaining about the tax rate, then it is not likely that such a county can afford a college, or what is even worse, it might be able to afford one but it doesn't think it can. When a community is willing to tax itself until it hurts for the support of one of these colleges, the state is willing to go along with them a long way. The State Board of Education has taken the position that of the money available for education in a county, public schools have first call. Satisfy the public school needs, the communities are told, and then talk community college. One can imagine the overwhelming support this position has received from superintendents and local boards of education. The fourth criterion relates to the establishment of community colleges in such a way that they do not compete with existing colleges. The fifth criterion, one without which there is no college, is that the legislature must provide the money for the institution. Funds for the community colleges are provided on the state level, since the state pays almost 75 per cent of the cost of these institutions.

The present program is costing approximately $2,000 per student for capital outlay. Setting up an institution for 400 students costs about one million dollars in initial capital outlay; one for 600 students will cost about one and one-half million dollars. Most of our colleges initially run from one million to two million dollars. Again, as the student body increases, the per capita cost comes down. Current expense, as stated earlier, runs approximately $120 for the student, $100 from the county and the rest of the bill, whatever it might be, from the state.

In North Carolina now there are two junior colleges, one in Charlotte and one in Elizabeth City. One more will open in the fall of 1964, and four should open in 1965. There will be four more in 1966, and possibly three or four more in 1967. It is difficult to project farther because it is not known now which communities are going to ask for institutions.

We are now nearing the end of our first year. We have run into a few problems along the way. The first one is tradition. When some people graduate from college in a certain course, they want to tighten up the standards for everybody else. People seem to be afraid that the state is going to provide second rate education, even though the deans of every graduate school in North Carolina are on the advisory council. There is some suspicion of the motives of the academic people by the technical and trades people, and there is suspicion of the technical and trades people by academic people. These groups are not accustomed to each other and it takes time for them to work out their differences and to start working together. Progress has been made, however, in the one year of operation. North Carolina is thinking in terms of one institution with three different kinds of programs instead of one campus with three different kinds of institutions. The faculties are interchangeable as some of the people teach in the college parallel program and also in the technical and vocational program. Some of the facilities, such as laboratories, are also interchangeable. We are trying to mold one student body, taking different programs such as you have in many colleges. Another problem has been the public image held by many people who look upon the community college as a small university. The first question usually asked by the community when a college is being established is how soon will it be a four year college? Our answer is never. Our belief is that flatly and irretrievably never can a community college be a four year college; when it becomes a four year college it is no longer a community college, it becomes something else.

Another problem experienced is staffing the colleges. We intend to staff the colleges with people from where ever we can obtain them. We are going to get them from the same sources that universities are getting them, from the private colleges, the four-year colleges, junior colleges already in existence, and from high schools. Admittedly, this will rob some high schools of some of their best teachers. Every graduate school in North Carolina right now has a program for the training of community college teachers, so there is hope that a new source of teachers will soon be available.

Starting this new program in North Carolina has been a big challenge to the people of our state, but we think the benefits will far outweigh any difficulties we have in the expansion of Post-High School education in North Carolina.

PROGRAMS IN FLORIDA FOR POST-HIGH SCHOOL AGE YOUTH AND ADULTS*

James L. Wattenbarger
Director of Division of Community Junior Colleges
Florida State Department of Education

Each state has its own way of operating which is bound very closely with tradition and with organized patterns which are present in that state. The program in Florida is no exception.

The junior colleges are probably more indicative of the history and the tradition of a state, educationally speaking, than any other type of institution we have. Junior colleges have been a typically American development and are, as a matter of fact, one thing that a few foreign countries have copied. Several foreign educators are now traveling around the United States looking at junior college development. This country will have a somewhat different program of junior colleges in each of its states because each state has developed somewhat differently in the matters which relate to post-high school education.

Aside from the fact that North Carolina is getting some of our better people from Florida, we welcome the fact that North Carolina has taken giant steps toward the development of a program of junior colleges. Florida is perhaps two or three years ahead of North Carolina in this respect, and perhaps by having gone this way earlier, might be of some help to other states in the Southeast.

We have developed in Florida over the past five to seven years a new pattern of higher education. This is a pattern which we believe is going to be the pattern of the future. It is a pattern which may be resisted by a number of people who are involved in higher education, but it seems to be an inevitable pattern. Almost all high school graduates will attend a junior college in the future. The universities will begin their work at the junior level and almost all students who graduate from high school will find something in the junior college which will be of value to them. As of fall, 1964, Florida will have 19 junior college areas in operation. These institutions will be within commuting distance of almost 70 per cent of the high school graduates. Over 60 per cent of the freshmen in the state will be attending junior college. Universities now have selective admission standards, and they have limited freshmen classes to the point where approximately 1,800 freshmen in a total enrollment of over 10,000 at Florida State University and 2,300 freshmen in a total enrollment of 15,000 students at the University of Florida will be admitted. In other words, our universities have definitely developed a policy of controlling their freshmen admission, not only by academic admission standards, but also by numbers. Florida has one new university opening next fall which will not offer freshmen or sophomore work, Florida Atlantic University, at Boca Raton. In 1967 the new University of West Florida at Pensacola will open without freshman and sophomore classes.

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*Address made to the Conference on Meeting Educational Needs for Post-High School Age Youth and Adults, Auburn University, Auburn, Alabama, June 22, 1964.

This development has come about gradually but in some respects now seems to be proceeding very rapidly. Planning was begun in 1955. The first of the new junior colleges was opened in 1957. Previous to 1957 there were four junior college areas. Florida built its present program on top of those four. By fall 1964 there will be nineteen junior college areas in operation. The final plan which will be effected before 1970 envisions junior colleges within commuting distance of 99 per cent of the state's high school graduates. There will be twenty-eight junior college areas.

Florida's junior college program has been one in which state responsibility for the program has been heavily emphasized, although we have believed and worked almost continuously in developing local control over our junior colleges. It is, in other words, the state's responsibility to see that its citizens are educated. The institutional control is at the local level; the implementation of the basic purpose is achieved at that level.

A recent publication of the educational policies commission caused quite a lot of comment around the country. In the final chapter there is a quotation which goes as follows:

> If the individual freedom is the American ideal, if it is increasingly pertinent to the social well being, the common practice of ending one's education at the high school level cannot be defended. It should be public policy to promote the universalization of educational opportunity beyond the high school. The ideal would not by this policy be guaranteed for all Americans but a large and indispensable step toward it would be taken.

This implementation of the American dream of educational opportunity for all is in reality not new to those of us who have worked in the areas of public education for many years. Even the founding fathers of our country, Thomas Jefferson and others, considered education essential to the development of citizenship. We have since that time found that education is also essential to the development of economic stability, not only for the individual but for society in general.

Responsibility for education in the United States has traditionally been a state responsibility. In most instances states have followed through by assigning a portion of the responsibility for education to the local school districts. In some instances the responsibility has been assigned to townships and in other instances to counties. In all cases, however, a local school district has been responsible for some designated level of education. The state at the same time has assumed and accepted the responsibility for overall planning and for making certain that all individuals within a state have equal opportunity to take advantage of education. The state then has a very definite and specific responsibility for the growth and development of post-high school education as well as for the basic education of learning to read and write.

You will note from the statement of the Educational Policies Commission that we have extended this concept of local responsibility beyond the level which has been previously accepted. Universality of opportunity would require some version of educational opportunity at the post-high school level. In the beginning most persons were committed to the idea that the state should see to it that every individual learned to read and write. This requirement was later formalized more directly by requiring everyone to complete at least six, then later eight, years of education. The requirement was extended to the high school level after secondary schools began to develop in the early and the latter part of the 19th century. The famous Kalamazoo case made it clear that a state could also assume tax support responsibility for high school education. Referral was made earlier to the land grant college act which placed the state squarely in the middle of providing higher education.

The United States is now facing the problem related to extending educational opportunity beyond that which has been available during the past century. As a matter of fact, we might say that we are now at the place in the development of post-high school education where we were in the development of high school education during the 1890's and early 1900's. Also, just as the past generation was expected to complete the eighth grade, with an increasing number expected tocontinue into high school, so our present generation is expected to complete high school with an increasing number expected to continue into post-high school education.

There are some decisions which a state must reach if it is going to accept this responsibility--decisions which Florida has reached and which every other state must consider. Some states have large numbers of four-year colleges already in operation along with a few junior colleges. Other states have very few four-year colleges and no junior colleges. Still other states have developed area technical schools which are already clamoring for additional "status" in the overall educational program. Some states have been able to conduct comprehensive and thorough studies for their needs in high education and as a result are developing excellent plans for meeting these needs. Other states still permit "topsy-like" growth to occur. It seems that all states, however, must assume a responsibility in answering four basic questions.

First, a state must decide to what extent it will be willing to accept responsibility for post-high school education. North Carolina and Florida have accepted this responsibility for post-high school education, making it available to everyone possible.

Second, the state must decide how great the diversity of educational opportunity will be needed. This is where the idea of selective admission comes in. Universities are in the position to use selective admission requirements when the universities have defined their programs so that they can select those for admission who are going into those programs. Until that time universities may have no right to limit admissions. But what is the difference in the selective admission of a student before he enters and selecting a student during his first semester by the process of elimination? Selective admission procedures in Florida have been applied at the university level so that less than 40 per cent of the high school graduates are eligible to enter the university. However, those young people who are not admitted have had an alternate path to further education. They have been able to go to a junior college and by proving their ability there can then enter the senior institutions at the junior level.

There is some discussion now of having additional selectivity at the junior level. This idea meets with a great deal of objection and it is doubtful that it will go through until there has been a great deal of clarification. As long as the paths are open and students are selected in terms of the purposes of the institution, selectivity taken on a different character. Thus, a diversity of educational opportunity is necessary. By diversity we mean the university should do what universities normally are expected to do: prepare professional people as well as provide the general liberal arts educational associated with the bachelor of arts degree and advanced degrees of the masters and doctoral level. Diversity also means that junior colleges must do what junior colleges are supposed to do; the three functions of vocational-technical education, continued adult education, and the education associated with the first two years of college--both general education and pre-professional in nature.

It means also that junior colleges must remain junior colleges. They cannot ever become four-year institutions because when they do they are no longer junior colleges and a gap has been created in this diversity of education which a state has previously decided is important.

Third, a state must decide whether or not it is important that it utilize human as well as natural resources. This country has placed great emphasis upon conservation of resources since the early 1900's when Theodore Roosevelt gave impetus to the conservation of natural resources. Quite often, however, we tend to forget our greatest natural resource is the human being. The example given earlier is quite vivid if one thinks of a country with limited natural resources and great use of human resources. There are countries, such as Brazil, which have great natural resources but have not developed their human resources. If a state decides that it is important to conserve its human resources, it must provide opportunities for its young people to be educated.

Fourth, a state must examine very carefully the traditional and historic factors in the development of public education in that state and determine which are important and should be preserved and which should be discarded. North Carolina, for example, has a considerable amount of centralization in controlling its junior college program. This is traditional in North Carolina; it operates very similar controls in grades 1 through 12. Florida on the other hand has a good amount of local control over its junior colleges. This is traditional in Florida and operates the same way in grades 1 through 12. In Florida, for example, about 55 to 60 per cent of the support for junior colleges comes from the state, but the control is at the local level. In the public school system about 50 per cent of the support comes from state taxation, but again the control is at the local level. Such a plan is a tradition that Florida has tried to preserve in its program and which differs from other programs.

There are probably three answers that any one state might give to the problem of the increasing number of young people who are coming into higher education and who want and need higher education. The first answer would be to limit the number of students who would be permitted to attend college. This could be done at least two ways: (1) by raising requirements so that only a small number of students can be admitted, that is, by selective admission or (2) by raising tuition cost so that only a few parents could afford to send their youngster to college. A number of states have tried both of these plans. For example, the University of Virginia, a public university, charges fees that are almost as high if not higher than a good number of private institutions around the country. This is a policy which eliminates some people from being able to attend the institution.

A second answer that could be used to settle the problem of increasing numbers of young people is to build more colleges and universities so that more people can continue beyond the high school. This solution would be a costly one and would not provide a much better answer to the problem than we already have. For example, this plan would admit 1,000 students, keeping only 700 for longer than one semester, eliminating another 300 before they finish the sophomore year. Finally, only about 300 out of the 1,000 that started will graduate. This plan would keep the cost down only a very little by eliminating students as they progress but it would raise the cost in the long run because there would have to be a lot of these institutions established.

A third possible answer would be to provide a variety of educational opportunity beyond the high school.

It is doubtful that in most states people will accept the first answer, that is, to eliminate students. If the second answer is accepted, and some places seem to be trying this, it would force a large number of students into educational activities which they undoubtedly will fail to complete, either because of the lack of ability, lack of interest, or lack of aptitude. In other words, the answer is not merely to make more facilities available. The junior college program is not merely trying to make more higher education available; rather it is trying to make a diversity of higher education available. Higher education must meet the needs of society at more than one level. We must have educational institutions that will provide education for scientists, for engineers, for teachers, and for other professions. We must have other institutions that require fewer years to complete, offering training for those occupations that are referred to as semi-professional, technicians and large numbers of specialized occupations. We also need institutions which will provide education for the skilled and semi-skilled workers. Four-year colleges and universities are becoming increasingly selective, and this has made possible the growth of other institutions to which students may go. A system of higher education must be flexible enough for each student to reach the highest level which his aptitude and performance requires.

After a state has decided that it is ready and willing to provide post high school education, there are probably three steps which should be involved in development of an implementation of this idea. These steps involve, first of all, a comprehensive analysis of post-high school educational needs in the state. This is not difficult to do and most people have pertinent figures already at hand. The second step involves the development of local surveys which help determine the specific educational needs of a locality within a state. And this is the process which we have been following for the last seven years. A recent survey in Florida found that in a particular county more than 100 graduates of the local high school were attending junior colleges out of the county because they could not go to the university in their home town. There is need for a junior college, in other words, in Tallahassee where two state universities exist. These facts could not have been determined without a carefully planned local survey. The third step involved in establishing junior colleges or two-year institutions would be to follow through on the implementation of these first two steps. The first step identifies the needs in a state, the second step the needs in a locality, and the third step the actual establishment and starting an institution.

There are several factors which must be considered as a junior college program is established in a state: (1) There must be some agency at the state level which has the overall responsibility for planning. (2) Assurance should be made that the junior colleges will offer a wide variety of programs. If the junior colleges limit their program to academic courses or to certain types of occupations, they are not comprehensive junior colleges and are in some measure doomed to failure. There are many examples around the country where junior colleges have withered on the vine because they refused to establish broad programs. (3) Junior colleges must be in a position to coordinate post-high school education in local areas. In other words, there should be some spot in a local area where people can get help, no matter what their educational needs may be. (4) Junior colleges must be considered as institutions that have worth and dignity of their own. They are not little universities getting ready to develop into four-year colleges. They are not high schools that have added two years of work. They are not second-class institutions. They have a reason for being. Unless the junior college is approached in this way its growth and development is likely to be restricted from the beginning. (5) There must be adequate financial support for junior colleges. Adequate financial support is necessary to secure qualified teachers and to provide facilities needed for this level of education. (6) The faculty in a junior college must be paid salaries in keeping with what junior college faculty members are expected to do. (7) If Junior colleges are to provide an alternate opportunity for young people, they cannot set up the same admission requirements which universities set up. Admission to a junior college should be an open process where anyone can find some educational opportunity which is a value to him or else find a way of getting to an educational opportunity which is of value. And (8) There should be formal as well as informal avenues set up to assure articulation among junior colleges and senior institutions.

The development of higher education in a state is incomplete until a sound and comprehensive community junior college program is developed.

PROGRAMS IN CALIFORNIA FOR POST-HIGH SCHOOL AGE YOUTH AND ADULTS[*]

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Post-high school youth and adults in the state of California have numerous opportunities to continue their education. The state university, the state colleges, the community junior colleges, the private colleges and universities, and the adult schools are available to help youth and adults increase their knowledge and skills.

The University of California now has nine campuses spread throughout the state, with three of these campuses (at San Diego, Santa Cruz, and Irvine) opening as general branches of the university for the first time within the next year or two. The emphasis at the various branches of the University of California is strongly oriented toward the liberal arts, the sciences, and the professional schools.

The University of California Extension Division reaches a large number of post-high school youth and adults through a broad program of extension courses offered throughout the state. Approximately 205,000 individual registrations were expected in the 1963-64 school year through University Extension in about 5,000 programs of all types.

The California State College System now includes at least sixteen different campuses and also is developing new campuses rapidly. In earlier years the state colleges emphasized vocational education and teacher training, but now they have developed broad academic programs to supplement their offerings.

The State College Extension Division is not as large as the University Extension, but the State College Extension serves approximately 30,000 persons in about 1,000 different classes throughout the state.

There are many notable private institutions of higher education in California—both universities and colleges--and some of these institutions--such as Stanford University, the University of Southern California, and the Claremont colleges—serve a large number of post-high school youth and adults. Of course, the emphasis for the most part in these institutions is on the liberal arts, the sciences, and the professional schools. There are also some private vocational and technical schools, but these are relatively small in number and insignificant in the total program of higher education in the state.

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[*] Address made to the Conference in Meeting Educational Needs for Post-High School Age Youth and Adults, Auburn University, Auburn, Alabama, June 22, 1964.

Community Junior Colleges

In my estimation the most phenomenal program for post-high school youth and adults in the state of California is the public community junior college. These institutions sometimes are called city colleges, community colleges, junior colleges, or just plain "colleges". The state of California now has more than twice as many public community junior colleges and six times as many students in these colleges as any other state in the nation. As a matter of fact, California had almost one-half of the total number of students in public junior colleges throughout the nation this past year according to the statistics published by the American Association of Junior Colleges in the 1964 Junior College Directory. In October, 1963, the public community junior colleges in California reported 389,538 students were enrolled in their programs. Of this number a little over one-third were full-time students, and slightly less than two-thirds were part-time students.

Whereas the private senior colleges and universities served a comparatively large number of post high school youth and adults, there are only a few private junior colleges and they serve an almost insignificant number of students--only 1,072 full-time and part-time students were reported for the private junior colleges in October, 1963. When we remember that the public community junior colleges in the state served almost 390,000 students, we can judge the popularity of these public post-high school institutions in California.

It is also interesting to note that approximately 49 per cent of the age group for college freshmen in California are reportedly enrolled in college. It has also been reported that about 80 per cent of these college freshmen are in the community junior colleges. In addition, 65 per cent of the college sophomores and 83 per cent of all unclassified college students (adults usually) are also enrolled in the community junior colleges.

What accounts for the popularity and success of these public community junior colleges in California? That is not easy to answer, but these colleges have generally benefitted from favorable legislation and public support. In turn, the community junior colleges have developed a broad range of educational programs to serve the educational needs of many post-high school youth and adults in their local communities. These colleges have not limited themselves to one type of curriculum, but have developed comprehensive educational programs. And the graduates of these programs have usually been very successful on the job and in further educational studies.

The first state law, known as the Caminetti Act of 1907, merely permitted high schools to establish a junior college to offer the first two years of post-high school education. Fresno High School in 1910 was the first school to take advantage of this legislation by establishing a junior college--although they only had three teachers and a handful of students when they first started. Santa Barbara in 1911, Los Angeles in 1912, Fullerton and Bakersfield in 1913, and other high schools soon took advantage of this permissive legislation to establish junior colleges. For the most part these early junior colleges were really part of the secondary school system--grades thirteen and fourteen--as they usually utilized the high school facilities and staff members.

Vocational and technical training was added to the curriculum by those school boards that saw a need for it. In 1915 and 1917 additional county and state aid was allotted for these local institutions and the number of junior colleges continued to increase. Nevertheless, there were still a relatively small number of students enrolled in these junior colleges by 1921 when legislation was enacted which permitted the establishment of the independent junior college district.

There are several types of organizational patterns for public community junior colleges in California. These include the (1) high school district operating a junior college, (2) the unified school district with a junior college, and (3) the independent junior college district. However, there are really two types of independent junior college districts--those with a common board and common superintendent (common with a local school district) and those with a separate board and a separate superintendent.

The number of high school districts operating junior colleges is rapidly decreasing in California, although this was the original type of junior college organization authorized back in 1907. In 1955 there were sixteen (16) of these high school districts operating junior colleges, but the number dropped to five (5) last year, and next year only two high school districts--both in rural areas--will probably operate junior colleges. Current law no longer permits a high school district to establish a new junior college, although those high school districts presently operating junior colleges may continue to do so until a reorganization takes place in the area.

Unified school districts were also permitted to operate junior colleges. In this case there was a common board of education and a common central administration for kindergarten through the junior college. In 1955 thirteen (13) unified school districts operated junior colleges, while last year only ten (10) unified districts operated junior colleges and next year probably only eight (8) unified districts will operate junior colleges.

The most popular type of organizational pattern for public community junior colleges in California is now the independent junior college district. In 1955 there were twenty-four (24) independent junior college districts. This number increased to fifty-one (51) last year and will probably be fifty-six (56) next year. However, it is interesting to note that California has two types of independent junior college district--those with a common board and common superintendent with the local public school system and those with a separate board and separate superintendent from any other local public school district. To my way of thinking, the independent junior college district which share a common board and common superintendent with the local elementary and secondary schools are really a variation of the unified school district system. However, the trend for the future is toward the completely independent junior college district with a separate board and a separate superintendent.

You will note that if the number of districts in California operating junior colleges are added together, the total is sixty-six (66) districts. However, this does not mean that there are only sixty-six public community junior colleges in the state of California. Many of these districts have more than one junior college or more than one campus, and the number of these multi-campus junior college districts is rapidly growing. For instance, the junior college district for the city of Los Angeles already operates seven (7) junior colleges, and they are presently planning for several additional junior colleges. San Diego, Long Beach, Orange Coast, Ventura, San Mateo, and Foothill are among the junior college districts which currently have two or more campuses, or they are in the process of establishing two or more campuses within the next year or so. Other junior colleges operate extension centers where junior college classes are offered to citizens in remote sections of the district.

There are in excess of seventy public community junior colleges in California now and the number is rapidly increasing. The American Association of Junior Colleges listed seventy-one (71) public junior colleges in the 1964 Junior College Directory, but this list does not include all of the new districts nor does it include some of the multi-campus junior colleges.

The sizes of the public community junior colleges in California vary greatly, but generally they are among the largest in the nation. Twelve of these colleges each have a total enrollment over 10,000 students (part-time and full-time) while only seven are under 1,000 in total enrollment as of October, 1963. They vary in size from 234 at Lassen College and 295 at Palo Verde College to 16,241 at Los Angeles City College (the largest of the seven colleges in the city of Los Angeles) and 24,388 reported for Long Beach City College, although Long Beach's total includes about 19,000 part-time students.

The goal in California is to include all of the area of the state within a junior college district by 1967, although the goal was originally set for 1965. At the present time only about one-half of the area of the state is within a junior college district, but this includes practically all of the most populated sections of the state.

There are no tuition, no matriculation, and no registration fees required for residents of the state who attend a public community junior college--but that does not mean that taxpayers in areas of the state which are not in a junior college district do not have to pay taxes for junior college operations. Everyone, of course, pays state taxes and the community junior colleges receive about twenty-five per cent (25%) of their income from the state (the Master Plan to be mentioned later in this paper recommends 45 per cent). Local districts thus pay about 75 per cent of the costs. However, it is also interesting to note that by law the local areas which are not in a junior college district also must have a special property tax to pay the costs of students from these areas who enroll in a junior college. These out-of-district costs paid by the local taxpayers--not the students--in non-junior college district areas include a computed share of the operating costs plus $300 annually per student for capital costs.

The only costs to students are the student activity fees (which usually amounts to $10 or $15 per year), plus books and supplies. In addition, the junior colleges do not operate school buses, because most of the students use their own cars or public transportation to come to college at times that fit their schedule. Very few of the junior colleges in California operate dormitories as these colleges are truly commuter-type community junior colleges. Needless to say, the availability of this low-cost type of higher education has been one of the factors responsible for its great popularity.

It might be mentioned that next year for the first time, out-of-state students who carry six or more hours of work per semester in these public community junior colleges will be required to pay tuition (I believe $10.20 per semester hour for next year). In addition, some of the junior colleges also charge a small fee (often $2 to $5 per course) for adults taking work at the junior college.

One remarkable factor about these public community junior colleges in California is that most of them are truly comprehensive community junior colleges. They have developed educational programs to serve a large number of their local citizens, including the following fuctions commonly attributed to a community junior college:

1) The liberal arts, sciences, and preprofessional courses to prepare students for transfer to the state university, or state colleges, or private colleges.

2) Technical and vocational education to prepare students for occupational positions immediately upon graduation from the college.

3) General education for the development of individuals into better citizens, better workers, and better individuals.

4) Adult and continuing education to help local residents develop life-long learning.

5) Guidance and counseling services to help the students determine their life goals and the appropriate educational programs to prepare for these life goals.

6) Community services (usually of a non-classroom nature) including cultural, recreational, and community development programs for all residents of the community.

Some of the community junior colleges may emphasize one function more than others, especially during the early years of their existence, but generally most of them soon develop a comprehensive educational program. Advisory committees of local businessmen and citizens are frequently established to help the college develop each of the technical-vocational, adult, and community service programs in order to meet the needs of the local community. Close articulation with the senior colleges and universities is established in the development of the university-parallel, transfer curriculums.

In some areas of California there are a number of adult high schools or adult evening schools which serve the residents of the community also. In these areas, the public community junior college usually offers only what is called graded, college-level and college-credit classes while the adult schools offer what is called the ungraded, less than college-level classes. There are also a few junior colleges, such as Los Angeles Trade-Technical College, which specialize in the technical or vocational curriculums, but they also offer other types of curriculums and the trend is toward developing a more comprehensive program in these colleges also. The fact that these community junior colleges are comprehensive can easily be seen by the large number of part-time and adult students which they serve and the large number and variety of curriculums and courses offered by each college.

One can not discuss the educational program in California for post-high school youth and adults without commenting on the Master Plan and the Coordinating Council for Higher Education.

Through the years there have been a number of surveys of higher education in California, but none of them have had the far-reaching effect as the last major survey, called the Master Plan for Higher Education in California for 1960-1975. Many of the recommendations of this survey on the needs in higher education for the state were adopted into law by the 1960 state legislature and are now being implimented.

One of the outcomes of the Master Plan was the inclusion of the junior colleges in California as part of the system of higher education. In the past, the junior colleges had been considered as part of the secondary schools in the local public school system, and there are still some persons and some regulations which continue to treat the community junior college in this way. However, the trend as stated in the Master Plan is to consider the community junior colleges as one segment of the tripartite of public higher education in the state of California along with the state university and the state colleges. Incidentally, control of the state colleges in 1960 was transferred from the State Department of Education to a newly established and separate Board of Trustees for the California State Colleges. However, statewide supervision of the community junior colleges still remains in the Bureau of Junior College

Education within the State Department of Education, although there are some persons who wish to establish a separate state board for the junior colleges. Most junior college administrators in California oppose this step at the present time. The University of California is under the control of the Board of Regents.

To coordinate these three segments of public higher education in California (state university, state colleges, and public junior colleges) and to serve as sort of a "super board of higher education in the state", the Coordinating Council for Higher Education was established as a result of the Master Plan. The Coordinating Council consists of fifteen members (15)--three each representing the state university, the state colleges, the junior colleges, the independent colleges, and three citizens. The Coordinating Council for Higher Education has three primary functions:

1) To differentiate the functions for public institutions of higher education in California.

2) To approve the location of new campuses for all three segments and provide for the geographical distribution of services.

3) To distribute financial aid and recommend the level of state support for each institution.

The Coordinating Council makes its recommendations directly to the State Board of Education, and so far it has been very helpful in determining the role that the junior colleges, the state colleges, and the state university is to play in the state of California. Of course, there are some differences of opinion among the various segments of higher education, but the Coordinating Council helps to solve these problems by taking a look at the total picture for higher education in the state.

It is interesting to note that no state college or state university in California is supposed to establish a lower division (the freshmen and sophomore course offerings) until a community junior college has been established in the area. This demonstrates that there is an understanding in California of the complementary role of these various institutions of public higher education and the cooperation that is needed to serve the post-high school educational needs of the youth and adults in the state.

The Master Plan also established admission policies and regulations for the state university and the state colleges. Only the top one-eighth (12½%) of all graduates of public high schools may enter the state university directly upon graduation from high school, and only the top one-third (33-1/3%) may enter the state colleges directly upon high school graduation. The junior colleges usually accept (1) any high school graduate or (2) any person eighteen years of age or older who can profit from instruction. For various financial or social reasons, many of the top high school graduates first attend a junior college and then transfer to the state colleges or state university. Many students, not eligible to attend the state colleges or state university immediately after high school graduation are able to attend the community junior college to develop a good academic grade record and then transfer to the state college or university for their upper division work.

In summary, I wish to say that the public community junior colleges have been very successful in accomplishing their goals in the state of California. They serve a large number of part-time and full-time students--both youth and adults. Many of these persons would not have an opportunity to continue their education were it not for the public community junior colleges with their low-cost but effective comprehensive educational programs. The public community junior colleges are now becoming recognized as part of the system of public higher education in the state, and thus are able to increase their service to the state and its citizens.

OVERVIEW OF STATE PLANS IN ALABAMA FOR TRADE, TECHNICAL, AND JUNIOR COLLEGE EDUCATION*

Austin R. Meadows
Alabama State Superintendent of Education

Our present state administration is going to make history on a number of things, but especially on a breakthrough program in trade school education and junior college education. One of the things that makes this program so important is that it takes the lid off the education of youngsters in the State of Alabama. It gives the teenage youngsters of this state a real reason for going through high school. The purpose of this trade school and junior college program is to blanket the state with educational opportunities that go beyond the high school. Our economic society, and I think very well of our social culture, now really places a premium on education beyond the high school as never before and as probably never anticipated before.

Now psychologically and philosophically these things are tremendously important. A youngster needs to know that he can continue his education and this applies to adults too. However, this program is primarily for our youth. America has been known as the land of opportunity as people came to America for economic opportunity. There are still many frontiers here.

This program of trade schools and junior colleges is attempting to blanket the whole state so that trade schools and junior colleges will be within commuting distance of every youngster. It is carrying out our philosophy of economic opportunity in the land of opportunity for all. It, also, is carrying out the American dream that helped to make this country what it is today. We would not have come this far without our public education.

What we are saying right here in Alabama with this program is that Alabama needs the talents of every youngster--all of the talents fully developed. We need to find out what these talents are--that's a part of the testing program. I got a thrill out of being able to work to launch our state-wide testing program in the 8th grade and the 11th grade. The purpose of this testing program was to help each and every youngster to identify his or her talents and then make the wisest use of those talents. Educators can help these youngsters to reap a rich reward from analyzing their talents and finding out what they can do with these talents in the future.

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*Address made to the Spring Conference of the Alabama Association of School Administrators, Auburn University, Auburn, Alabama, April 27, 1964.

The name of the state agency in Alabama with control over the trade schools and junior colleges is the Alabama Trade School and Junior College Authority. All land deeds must be deeded to the Alabama Trade School and Junior College Authority in order to operate. The law states that when this agency has finished up its work and is no longer organized then the schools, the land sites, and all facilities will be the property of the state just like it is now in regular high school buildings where it is deeded to the state. This authority in its last meeting voted to go ahead and sell $7,500,000 worth of bonds so we could get started on the building program. They also approved tentative allocations of funds for the individual trade schools and junior colleges. Later, this authority will have to legally allot the money, but there was an allocation so the plans and specifications could be started for this program.

The plans and specifications for these programs in all of these centers all over the state require that there be a master plan of what to anticipate when the program is fully developed. Then the plans and specifications would be drawn up in terms of this master plan. We hope to build what we can build now in each and every one of those centers with the provision that as needs develop later and as funds become available for building purposes, the building can be in terms of a master plan--not just be a "hodge podge" of something you didn't think of originally. We are progressing in that direction although it will take some time for these specifications to be drawn up and for the provisions to be made before letting the contract. The building commission itself is headed up by the director, Mr. Rutland, who is in charge of having the plans and specifications drawn up. They estimate that they hope to start letting contracts in three to four months. After letting the contract, of course, construction on the buildings needs to start. Now the plan is to have all the plans and specifications ready for all the centers without holding up on one, two, or three centers.

Of course, I make the recommendation and argument that certainly to the extent possible, the junior college in Northwest Alabama is going to take preference, and I think it ought to take preference because it is already in operation. They have students there and I think that it ought to be pushed forward. This junior college in Northwest Alabama also has an appropriation to operate the school. Now, as a matter of record, there is only $300,000 appropriated annually for the operation of these schools. You can readily see that if you hire presidents and directors for all of these schools on a full-time basis now, that would absorb most of that money. So the State Board of Education is not employing directors for all of the trade schools.

The State Board of Education has recently employed Mr. Dorsey Haynes without assigning him to any particular trade school. Mr. Dorsey Haynes will work as the administrative executive for the trade schools' program. Now Mr. Otto Smith has already been employed for the trade school in Jefferson County in the Bessemer cut-off area; he went to work on April 16. Dr. Kermit Johnson was kind enough to release him to begin this program. Mr. Solon Gregg has been appointed director of the trade school at Hamilton, Alabama, in Marion County; he is to start work on June 1.

Together with Mr. Hulsey, Mr. O. P. Richardson, and the surplus people at Attalla, we plan to search the country to get all of the surplus property brought to Attalla and stored there where they can take care of it until time comes to allot the equipment to different places as needed. In that way we hope that we can get millions of worth of surplus property for the trade schools and also for technical education.

The State Board of Education has employed Dr. Knox from the Bridgeport-Stephenson area as president of one of the junior colleges without designating where he will be. He is going to help do the same job for junior colleges on surplus property and planning that is going to be done for the trade schools except we do not anticipate that there will be much machinery needed for the junior colleges; certainly not the heavy type machinery that can be used in the trade school.

It is entirely possible that these people who will be working with Mr. Ingram helping out the surplus property people at Attalla may be able to save some money in the purchasing of certain other school equipment and supplies. We are going to investigate this possibility to the fullest and we will go as far as we can to get ready for the opening of the new trade schools. Of course, the state appropriations--even if you did not employ any more directors and any more presidents--would not be enough to operate more than one trade school or junior college.

One part of the program, I think, is of special interest. Under the present plan the junior college at Gadsden, Alabama, is to be a technical institute offering technical courses that could be accepted as credit elsewhere provided we abide by proper standards of instruction and equipment and give work that certainly would justify the other colleges of accepting these courses. We would have to work all of this out as nothing has been worked out on it yet; and if it had been, it would probably be wrong anyway.

There are a lot of changes that are needed in education. I am sure you read the speech of Dr. Mel Bentley where he said there must be a revolution in education. I think he is applying his statements to the high school and certainly we are having a revolution in that respect. He said that schools and teachers were to blame for the drop-outs in the high schools. However, they are not to be blamed here in Alabama, not for the high percentage of drop-outs that we have, as we certainly have highly qualified people in secondary schools. We have as highly trained people in secondary schools as the average of the nation, and these teachers in the high schools are trying to do a wonderful job. They are keenly interested in the drop-out problem. We are having to overcome a resistance in this state that is not an intended resistance. We are having to overcome a resistance on the part of parents to having their children complete high school, parents who did not go through high school and who, themselves, do not understand high school. They are not intentionally resisting but they are doing it by not helping with the total program. We had a speaker at the Alabama Education Association who spoke to us about the trouble in Georgia that he had helped to overcome because parents have not understood the need for high schools. A lot of the parents of children who drop out of school after the eighth grade have not understood the high school. We haven't been able to inform them enough as they did not go through high school themselves. If they were unsuccessful in the things they tried to take in high school, they didn't like it; and people just don't do much about things they don't like. You don't usually play games you don't like, no matter what it is; and you are going to quit that game pretty soon unless you're mighty, mighty tough.

Perhaps one of the problems we are going to have is the motivation of parents on this program. I anticipate that some of the parents will think that the youngsters ought to get out of high school pretty early and go on into a trade school. That is not the purpose of the trade schools. It is not the purpose of the trade schools, as we understand it, to encourage anybody to quit the regular high school program to go into something because they don't particularly like the high school program. We think that the youngsters will need the high school program. About 95 per cent of the youngsters that get into the 8th grade can do a good job in some phase of high school work, and I think that will help them tremendously for this program. The better high school educated people we have, the better trade school people we will have. Most trade school directors would rather have high school graduates in trade schools than non-high school graduates.

The master plan will start off with building units that you must have, like the office and a place for people to have lunches. The junior colleges must have some provisions for teaching physical fitness. One of our schools got started without too much guidance. Mr. Glasgow, the president, who is a mighty good man, got started out there and the first thing I heard about he had a star basketball coach to come in as his first member of the faculty. Now I don't know how much of that for which he is responsible and if he is, I'll share the blame with him because I didn't inform him or talk to him about guiding him away from that. Now we are not developing junior colleges to set up basketball gymnasiums and just play basketball, but we must have a physical fitness program. I'm using that as one of the illustrations of planning. Nobody planned a thing for him and he had to do the best he could. Now if you were to get the famous round-ball man from Kentucky to come down here and you put him in a junior college, that would not build a junior college. Junior college students are not coming to junior college to see basketball and only a few will be able to play basketball so this alone is not going to get a student body. After you get a student body, basketball may popularize the school, but we cannot build a junior college like that now and there is no use kidding outselves. Now I'm not criticizing that man as he can do an outstanding job in physical fitness. I'm sure also that Mr. Glasgow does not resent my calling attention to this type of planning that is going to need to be done in these junior colleges.

Mr. Stapp is spending full time on physical fitness programs for the state high school course of study, and there is much to be done in the physical fitness program. My guess is that about 40 per cent of these junior college people will go into teaching, and certainly we need to be starting out with a good physical fitness program. A good physical fitness program is a crying need in this state anyway.

One of the things that we need to do is to plot out how many acres will be needed for the different physical fitness programs. We asked for a hundred acres for each junior college. Now we are not going to get this amount for all of them, but we asked for one hundred acres, and we're getting it for several of them. We're asking for forty acres for the trade schools as a minimum; we're getting 100 acres for some of them, and we won't get quite forty for some of the rest of them. Now then, I think we need to tell the people of this state as best we can from our viewpoint what the educators think we need this acreage for.

Committees are needed to help work with the high schools and colleges planning this junior college program. We have committees working on what's going to be offered in the curriculum based on a certain number of students.

We are working toward finding deans and, of course, we are working toward finding people who would be directors of trade schools and presidents of colleges. You get more applications than you need, but you know that the more applications you have, usually the more you need to search and find out what are the qualities that are needed for this job and who could do the best job. We are mighty well pleased with the progress we have made thus far in this total program.

We've got new frontiers in this total program and something that we can really do something with. But all the while let's remember that the great thing this new program is going to be doing is saying to all youngsters, "You have a place to go if you will get through high school. You can go to a trade school or you can go to junior college. The doors are open. Your talents are needed and your talents are wanted. You have an obligation to develop your own talents. You have an obligation to yourself, and you have an obligation to mankind. You have the obligation to push forward, to do your part in the development of the culture of this state, the development of the best political life, the best economic life, just the best living possible in this whole situation."

We don't propose any dormitories at any of these new places whatsoever. The students will have a place they can go to for further education. However, they will have to commute to these schools as best they can.

Now the federal government is proposing to spend about $1,190,000 a year for community centers; if it is ever appropriated this money will be available. There will be certain requirements including a state plan. The Governor has already designated the State Board of Education as the state agency to approve plans when appropriations are made. There will be about 10 to 20 pages of regulations for every page of laws in order to explain the law.

The proposed allocation for technical education in 1964 is $1,268,000 for all vocational institutions. That won't be much of an increase, but for the next year it will be twice that, and then for the third year it will be $3,752,000, and for the fourth year $4,756,645.

Now the people at the national level have done a lot of thinking on this and they obtained counsel from Fred Ingram and other trade school directors. Here are some of the things that they have changed in this law that you will be able to do. First of all, home economics has been redefined to include related fields of activity in home economics, not just home building. Dieticians could probably fall in the new classification, and I'm hoping that school lunch room managers will also be included. Now in vocational agriculture the definition is being broadened to include allied jobs in connection with vocational agriculture. That will help in the program. The retraining program has some changes. The new law lowers the age from 19 years at the present time to 17 years of age. They can start at 17 if they have been out of school for at least one year. Now that won't mean that they can stay out of school one year just to participate in this program. They are trying to pick up the people who have been out of school for a year and let them come in under the training or retraining program.

Heretofore, the state has had to match 50 per cent of the cost, but the new program requires only one-third matching in 1966; that will help the states. This program allows 20 weeks of allowance to trainees who are taking basic education training instead of what they have now. Now a very sensible change, I think, has been made in this program permitting increases in weekly training allowances to $10 above the state unemployment compensation. In other words it would be worth $10 a week more for this youngster to go on and take this training than it would be for him to sit around and draw unemployment compensation. The law also allows the trainee 20 hours part-time work without any loss of training allowance. And that gives him a chance to do sidework along with his training and without losing anything.

There is another item here that's very vital, I think. The program reduces to two years the prior experience required for trainees to be eligible. The present work law requires three years. I look for that to even be reduced down some. In vocational education we tried to operate on a sound plan of requiring so many years of experience for a teacher to go into teaching trade and industrial education unless the teacher finished at a trade school. Now the scientists tell us that probably half of the high school graduates today will be working in the future on jobs that don't exist today. It can't be done. There will need to be some modification in the law. Another change is that this new law will permit one member of a family, where the head of the family is unemployed, to receive a training allowance but there will be only one allowance for each family. Heretofore, only the head of the family could receive an allowance. These are some of the things in trade and industrial education which will open up the doors to this whole training program.

Help from the federal level and help from the state level will permit expansion in all directions. Instead of having 45 per cent of our youngsters in the eighth grade dropping out of high school before they finish the twelfth grade, this state will move toward what some of the northern states have--90 and 95 per cent finishing high school and then going into the trade school or junior college. When this happens then the economy of this state will react to the additional skill and training of these people. The economy of this state will begin to move. Last year the total personal income in Alabama was $5,600,000,000--in 1939 it was only $706,000,000. It is my estimate that with this program in ten years the total personal income in Alabama will double. It will go over $11,000,000,000 instead of what we have today, and it could even go much higher. In addition, if we plow all of this economic gain back into good essentials of living rather than wasting it on whiskey, cigarettes, tobacco, and television, we'll have a better political life; and we'll have a much finer and higher culture and social life.

This new program means a lot of work to us but we enjoy working. As I have said many, many times only busy people do things. Don't put idle people on a committee if you want something done. Put the busiest people you can find on it and they will get it done. We look forward to working with you and look forward to cooperating with you 100 per cent in this total program. I am very thankful that you had the foresight in the steering committee to put this down as one of the things that you are working away on.

DEVELOPMENTS AND DIRECTIONS IN JUNIOR COLLEGE EDUCATION IN ALABAMA*

Ben A. Forrester
President of Enterprise State Junior College

A couple of years ago there was a move to establish a junior college in DeKalb and Jackson Counties after the legislature passed a bill authorizing one. The legislature didn't appropriate any money but a group of local residents interested in a junior college approached me as their school administrator for help. Unfortunately, I couldn't help them finance a junior college when I couldn't meet a payroll with the people I had employed already. However, a new state administration came along and did away with the proration of state school aid, increased salaries, and established the junior college and trade school program.

This community college program was recommended in the 1957 Alabama Education Commission Study. This report said that at that time Alabama was behind in a program of community colleges and recommended strongly that a study be made. Much time could be spent about how such a study ought to be made before we have any legislation and what legislation ought to be passed ideally. Much could be said about the need in Alabama for a community college program. However, a program has been initiated and laws have been passed, so we now have a program of community junior colleges in Alabama. These community junior colleges have been located and some buildings will be built beginning shortly. In addition, I think that some funds will be provided to operate these institutions. The Governor said at a meeting of the Alabama Education Association that these funds would be forthcoming, that the building would be completed, and that money to operate them would be found.

Now there are some people who aren't too enthusiastic about the junior college program. However, I guess I talked to 400 of the leading citizens throughout the State of Alabama that were making applications for these junior colleges, and these citizens are sold on them. It might be that some educators in Alabama do not favor the junior colleges, but the people are for them. These citizens will support them and they pointed out in every case that this was a program that was needed in addition to the good public schools and higher education programs that we already have. This junior college program in the mind of the people is not to detract from any part of our present educational program. But it is my honest belief that it will strengthen the public schools and higher education at the senior college level. Furthermore, it may increase educational support all over the state. Eighteen months ago I would not have agreed with this statement at all, but I am convinced now that Alabama's program of junior colleges is going to be a success. In September of 1966 by the time all of these colleges get their sophomores, we will have from 5,000 to 7,000 students in junior colleges.

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*Address made to the Spring Conference of the Alabama Association of School Administrators, Auburn University, Auburn, Alabama, April 27, 1964, while Mr. Forrester was serving as Assistant State Superintendent of Education in Alabama.

Accreditation is one of the problems facing the new junior colleges because the students must be able to transfer their credit to a senior college. It's our thinking that the junior college programs will begin primarily with the transfer program. I understand that two-thirds to possibly three-fourths of all of the students now in the junior colleges in Florida are in this transfer program which is sometimes called the university-parallel program. The comprehensive junior college is talked about a great deal, but every state has its own plan and every state must approach it differently. In Alabama the legislation for the junior college program has been different from other states. Some persons seem to think that because the program in Alabama is different from Florida, California, North Carolina, and some other states, that it can't be a success; but certainly every state is different.

Some think that a junior college should be supported one-third by the state, one-third by the students in the form of fees, and one-third by the local community. We have a state program of finance in Alabama for the junior colleges, and the only thing that the community has been asked to contribute has been the hundred acre site. In nearly every case the site has been purchased and deeded to the state trade school and junior college authority. Alabama law says that the State Board of Education will operate, manage, and control this program after the building authority has built and equipped them. Frankly, I think this is a good program although some persons would insist that you must have local control, probably under the local board of education. The Florida junior college program is controlled by the local board and some of them are disturbed by this system.

On accreditation we are working very closely with Dr. Gordon Sweet and the Southern Association of Colleges and Schools so that every plan and every effort can be made to have these junior colleges accredited when we first start to build them. In order to accredit these schools they will need to file an intent to become accredited. We're planning the buildings and setting up the courses with a view toward accreditation from the very beginning. In accreditation we will work closely with the senior colleges, and I might say that some of the colleges have a lot of fears about the junior college program. I had a meeting with the seven-state college presidents and the meeting was for the purpose of talking about the Higher Education Facilities Act, but they were more concerned about the junior colleges and trade schools seemingly than they were about Higher Education Facilities Act.

All of the problems have not been worked out. Many people have a tendency to compare the beginning program in Alabama with more established programs such as in Florida. Certainly they have a wonderful program, but the program in most states including Florida started rather inauspiciously. It was interesting for me to note that even Auburn University started rather inauspiciously many years ago with less than one hundred students in enrollment. I think that we will have some of these junior colleges in Alabama in the second year of operation that will have from 1200 to 1800 students. I think that after three or four years of operation we will not have any one of the present institutions that have been established with less than 300 students.

There are a lot of unanswered questions about the program, and I hope that this organization will make some kind of effort to meet in districts throughout the state to have some opportunity to work further on this program. If the program is to be a success, it will take the work and leadership of public school administrators in the community to make it a success. I am convinced that this program will mean a lot to people in our communities and that it will strengthen the total educational program in our state. We recognize that public school administrators have not been able to do much planning for junior colleges when they couldn't make the payrolls in the elementary and secondary schools for five years without borrowing.

However, if you are not informed on this new junior college and trade school program, chances are pretty good that you will not be for it. The students are for it, the people are for it, business, industry, chambers of commerce and people in general are for this program like they have been in other states. The junior colleges in Florida have been invited into the state system of higher education and recently shared in $35,000,000 of the $75,000,000 bond issue for college buildings in Florida.

In my visitation to the Gulf Coast Junior College in Panama City, Florida, they told me that 95 per cent of all the students that went to college from Bay County, Florida, went first to a junior college. Of course, in Florida's program of higher education the junior college has an important position. I might add that certainly in Alabama we need to plan for some sort of an orderly program of higher education.

We don't have an adequate plan for higher education in Alabama up to this time but I think it behooves us to try to get one. We certainly need it when it comes to participating in the new Federal Higher Education Facilities Act. The trade schools, junior colleges, and public technical institutes are to receive 22 per cent of the Federal money for building college facilities under this new act. These junior colleges and public technical institutes must be accredited in order to qualify for this federal aid. It is not clear just what the public technical colleges are going to be like--whether they will be a public technical institute to be accredited by the engineering society or a sophisticated trade school program to be accredited by the state.

We do not know about the need for buses for the junior colleges yet. It is my thinking that not too many of these students will ride buses. At Panama City, Florida, they said that the students didn't want to ride a bus to the junior college; after riding a bus for 12 years they would organize a car pool. I don't know what effect this may have on our plans in Alabama, nor do I know just how many trade school students ride the bus now.

So there are many problems that we have to work out, and I hope that every school administrator who is within a 50-mile radius of these junior colleges will meet with the president when he has been appointed and that you will meet with the trade school director to give him the benefit of your thinking on what you need. I would like to find out from the president of your nearby junior college just what information you would like to have mailed to you concerning the junior college program, and we would be glad to provide you with some materials. I would like very much to keep you informed as to what we are doing, not only that but to get the advantage of your advice and thinking on everything that we are doing because this program is your program; it belongs to the community.

This new trade school and junior college program in Alabama long with the Higher Education Facilities Act, the Vocational Education Act, and the Manpower Development Training Act sponsored by the Federal Government will place us on the threshold of solving the drop-out problems, by improving the educational opportunities of our people, and ultimately improving the economy of our state.

ALABAMA PLANS AND PROGRAMS WITH NEW FEDERAL LEGISLATION[*] IN VOCATIONAL EDUCATION

J. Fred Ingram
Alabama State Director of Vocational Education

You know, it is rather difficult to report against a background of what is occurring in California, Florida, and some other states, when here in Alabama we are struggling to try to get at least half of our people through high school. But I want to report about the new Vocational Education Act of 1963, which I think probably can help a great deal with the problem we have in keeping youngsters in school a little bit longer.

When I observe our usual public high school, I can't help but think of the alchemists of old, many of whom drove themselves crazy trying to make base metals into gold and other precious metals. As we began to develop our resources in this country we found a great number of metals, ores of different kinds. In some way we had sense enough to devise processes that would take each of these metals and, according to its characteristics, develop it into something useful. I expect that if I told this group that there are a hundred pounds of gold buried out there at a certain spot I would have to get out of the way, because you would probably run over me (as old as I am) in order to dig up that hundred pounds of gold! Yet, if I told you there were a hundred pounds of iron out there, you would probably not move out of your seats. Yet, you can do without gold a lot better than you can without iron. Now if these alchemists of old, or those of today, could turn the base metals into gold, I am sure that some of us would do it and when we did, civilization would fall, because iron is still the most basic important metal in our civilization.

In education we haven't used that much good sense. We have assumed that we could make all of our human beings, regardless of their characteristics, into this precious metal of professional people. I expect that some of us in education, if we could, would make every boy and every girl a professional worker, at least we pretend to believe that. Yet if we did, the civilization again would fall, because we can do without doctors and we can do without engineers but try doing without the farmer. We wouldn't last long! Or try to do without our skilled technical workers and skilled tradesmen who must fabricate into reality the dreams of our engineers and scientists, and see where we would end up.

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[*] Combination of addresses made to the Spring Conference of the Alabama Association of School Administrators, Auburn University, Auburn, Alabama, April 27, 1964, and to the Conference on Meeting Educational Needs for Post-High School Age Youth and Adults, Auburn University, Auburn, Alabama, June 22, 1964.

So the thing I am saying is that in education it is high time that we (ought to) recognize that human beings differ in their characteristics as much or more as do our metals. Then we ought to begin to structure educational processes that will develop these people into the useful citizens that they are capable of being, instead of trying to force them all into one direction. We need educational processes that will take people as they are and make the very best human beings of them that it is possible to make. Now I know you can't gauge human beings as you can metals, necessarily, but we could do a lot better job than we are now doing.

I hope as we move into this new Vocational Education Act that we will use some good sense in our high schools, and begin to recognize that all of our boys and girls can't get through high school in the traditional academic program that we've offered them. Some of them have no interest. Some of them have the kinds of ability to do other things, but not the kind of ability it takes to do traditional academic work. I somehow believe that Dr. Conant was right when he said that only about 20 per cent of the people can really profit by highly abstract education at an advanced level. I think he was right about that. So let's recognize that there are some other things that people can do. I worry a great deal about this, because I have a very definite feeling that our emphasis in the past has been in helping people most able to help themselves, and we have neglected those who are least able to help themselves. From that standpoint, I think we haven't been quite humane in our outlook on humanity.

I bother again to re-emphasize some of the things I know can be done. I've seen them done, and I've had a part in doing them, by which people can profit--things that a lot of us in Education would throw on the scrap heap. I don't believe that many people are born into this world where there isn't a useful place for them, if we as educators will take the lead and help to find the processes by which they can be developed into useful people. I think that most everybody who has "walking-around" sense, has a place in this economy.

One of the disturbing things that has been mentioned here before, I think, is that while we have about five million able-bodied people willing and wanting to work who are unable to find jobs, it has been estimated that there are over two million jobs in this country not filled because people with the right skills and knowledge are not available at the right places to fill the jobs. Two new programs, the Area Redevelopment Act Program and the Manpower Development Training Act Program, are geared toward that very thing, taking hard-core unemployed people, and through intensive training getting them prepared for jobs that are known to be available. We are having rather surprising success with these programs. In the beginning, many people were skeptical. Primarily, I will cite you two cases in Birmingham where we took some hard-core unemployed people. A group in welding, we thought, would remain in training for a year; but before eight months were up, industry had hired every one of them for pretty good jobs! Another group we had in electronics was also hired before they completed their training. We consistently find this pattern of success. So I think it's time that we (ought to) begin to think about some of these people, who the usual educational program just won't develop as they can be developed.

You know, if we consider Vocational Education in its broadest sense it would include medical schools, dental colleges, and all of the other areas of professional education designed to prepare people for employment. With the passage of the Smith-Hughes Act and subsequent Vocational Education acts, we have come to think of vocational education in a much narrower definition. As a matter of fact, we have come to think of it as that education of less than professional level, designed to prepare people for, or to upgrade people in, certain occupations. And we have usually confined it to those who could be supported with Federal funds under existing law. For that reason, office occupations have heretofore been excluded from the accepted definition of Vocational Education.

Until the passage of the new Vocational Education Act of 1963 the vocational program of this country and of this state consisted of the following: (1) Agriculture to prepare people to enter the field of agriculture and to upgrade those who are already engaged in it, (2) Distributive Education to train people who are engaged in the distribution of goods and/or services; (3) Homemaking Education for the girls and women who are preparing for or who are already engaged as homemakers, as a career; (4) Nursing Education, which was added more recently, to prepare girls for the occupation of practical nursing and to prepare people for other health occupations of less than professional level; (5) Fisheries Education, which is also a recent addition, to prepare persons for selling of fisheries' products and the actual fisheries occupations themselves; (6) Technical Education programs to prepare people for, and upgrade people already engaged in, highly technical occupations, and (7) the Trade and Industrial Education program, to prepare people for the occupations that we usually classify as trade or industrial.

It is well to note, also, that each of these separate programs I've listed has been supported with earmarked federal funds, and these funds could not be used for any other purpose. Even within these categories there were other instances of earmarking. A certain amount had to be used for teacher training, and a certain amount had to be used for part-time classes. Now, the funds that could not be used for the earmarked purposes have already had to be returned to the federal government or deducted from our next year's allotment. We've had to return some

Technical Education money and some Practical Education money every year since the enactment of those laws. The Manpower Development and Training Act (MDTA) and the Area Redevelopment ACT (ARA) programs are two other Federal programs (making nine in all), each having its own earmarked funds.

You are perhaps familiar with the television program called "That Was the Week That Was." What I have described to you is "That Was the Program That Was." As a result of a nationwide study, at the request of the late President Kennedy, quite a few changes were made in the laws that then existed, and a new law was enacted. These changes and this new law will enable Vocational Education to experience some new developments and to take some new directions. This we have needed for many, many years. Of course, we now can do many things that we couldn't do under the old law, but the new law is also so flexible that we now can do that which we think needs to be done.

Now suppose we consider a few of the major changes in the old vocational education act and some of the changes that were made by the new act. I think the most exciting thing is that the previous laws were not repealed nor were the appropriations authorized by those laws repealed. For the nation as a whole, the approximately $57,000,000 previously authorized by those Acts is still authorized. But in addition to the $57,000,000, the new Act authorizes $60,000,000 for the current year, although it is doubtful that the appropriation will be made in time. Next year $118,500,000 is authorized, with $177,500,000 for the following year, and $225,000,000 for each additional year. Now, all of this is in addition to the $57,000,000 that has already been authorized and appropriated. So that's the first change it makes--it increases the money tremendously!

As the second change, the Act removes all limitations as to the occupations to which training can be offered with new funds, with one exception: that is, we cannot offer training for occupations or vocations which are recognized as "professional" or which require at least a baccalaureate degree to enter. This is the only limitation that is placed upon the training under the new Act, and under that provision Office Occupations can be included, if we so wish.

As a third change, the new Act amends the previous Acts (the Smith-Hughes Act and the George-Barden Act) in certain respects. It broadens the scope of Agriculture to include occupations which require knowledge and skills of Agriculture. For instance, people who sell farm implements to farm people need a farm background to know what the implements can do. This would also be true of salesmen of fertilizers, chemicals, seeds, and so forth.

Another change that the new law makes is to require after 1965 that 10 per cent of the Federal funds that we now use for Homemaking Education must be used to train women in wage-earning jobs based upon knowledge of homemaking and skills of homemaking. It does not provide any new funds for Homemaking Education as we have known it in the past, although schools can participate in the new funds for training in the wage-earning occupations to which I previously referred.

Another change that it makes is to permit states to transfer funds from one vocational service to another, upon justification and approval. That will not effect Alabama in any respect that I can foresee, but the change was put into the law because in some states they were not able to use the funds for Agriculture. A good example is that the District of Columbia was annually allotted funds based on the population formula for teaching Agriculture and there isn't a foot of farm land in the District! So every year they would receive money for Agricultural Education, and they would send it back. However, now they can justify transferring such funds to other services.

Another change that I think will be of great help in the development of Distributive Education, which is one of our least-developed programs, is that we can now do preparatory training in this area; heretofore, it was restricted to people who were already engaged in the field of distribution. A very helpful thing, too, is that the new Vocational Education Act lowers the age of students who may enter Distributive Education from 16 to 14; the same is true for Trade and Industrial Education. The minimum age has already been 14 for entrance into Homemaking and Agriculture, but now it will also be 14 for these other two programs. Also, a very helpful new development, if we use it properly, is that we can now offer short intensive training in semi-skilled and single-skilled occupations for high school youth while they are still in high school. Then another change in the new law was to make the nursing education program and the technical education program both permanent authorizations whereas they had a five-year limitation heretofore.

Now the new act introduces some interesting innovations. Some of them are of great importance to the State of Alabama. One of the first things is that it does not mention Agriculture, Trade and Industrial, Homemaking, or any of the other old categories. Instead, the funds are based upon six purposes: (1) training of in-school youth--that's your high school youth; (2) training for out-of-school youth and adults who will return to school on a full-time basis; (3) upgrading people already employed; (4) providing education and training for the academically, socially, or economically-handicapped youth who cannot succeed in the normal vocational program nor in the normal high school program; (5) providing for the construction of area school facilities, and (6) providing for ancillary services, which are intended to put quality into the instructional program. The fourth category, including aid for handicapped youth, is an area that we have never worked in, and we need to do some study and some exploration to try every kind of thing that we can think of that might work for that group. As I say, no mention is made anywhere in the Act for Agriculture or any of the other categories formerly used. Our funds that are allotted to the state can be allotted to these six categories, but I think it is a little unfortunate that you have to match the funds by categories in which you use them. That will create a little bit of a problem in some respects. A state is free to allot these funds to these categories as it sees fit.

Now in light of these changes, what are some of the new developments and directions which we anticipate? Of course, we still don't have a state plan and we still don't have final instructions from the United States Office of Education as to what the state plan and guide lines will be, but we do foresee some of the things that we will be doing. One of the first is that in Vocational Agriculture we will continue to prepare some boys for entering production farming; we can't ever neglect that area. We will also continue to upgrade young farmers and adult farmers who are in need of help to become more proficient in their work, but in addition to that we will also place more stress upon Agriculture as a background for boys who will work as wage earners in occupations related to Agriculture. Now this new act makes this new emphasis legal, although I think we have been doing a good bit of it all along; however, this Act encourages it and makes it possible to do it.

I suppose the most significant new development possible under the Act, if we will use it, is the provision for "area" schools. Now this "area" school can be a high school that has as many as five Occupational Training areas attached to it, or it could be a separate vocational high school, or it could be special Vocational-Technical Schools such as the new ones that have been authorized in Alabama--or it could be a junior or senior college with as many as five Occupational Training Areas. This should offer encouragement for consolidation of some vocational programs. We have so many small high schools that you can't put an appropriate and suitable occupational training program in these small high schools because there would not be enough students to support it. So if we will use this Provision of the Act properly, a single county or several counties could come together and establish what might be known as an "area" school facility in which five or more Occupational Training courses would be offered. Students from any high school in the counties participating might attend this area school for the occupational training phase of their work. This is the only way we will be able to reach some of our rural areas to prepare boys and girls who are destined to leave those areas and move into urban areas to seek employment.

I think that the lowering of the entrance age to 14 years for Trade-and-Industrial and Distributive Education has great significance. It will enable many high schools to offer one or two years of really good education in certain occupational fields. I didn't say "occupations"; I said "occupational fields." To illustrate what I'm talking about, we might think about electricity. Now after studying basic electricity, students would have an opportunity later to go in many directions, as far as specific vocational training would be concerned. They might go into radio-television repair, household wiring, motor repair, refrigeration, and electronics--you name it, and it's there. If you want to see how many ways they might go, you can look in the Dictionary of Occupational Titles. There are several pages of occupations listed there called "Electrical." Now a student going into any one of those areas has to know certain basic information about Electricity. It seems to me that, beginning about 14 years of age for certain students, a really substantial program to develop a knowledge of basic electricity and its application would prepare these people in the event they go to a trade school.

There are several such occupational fields that could be set up in high schools. One of them would be what I'd call "mechanical," where you would deal with the repair of automobiles, washing machines, or any number of categories in which the student would learn certain basic information, gain certain basic skills with which he could move in many directions for specific occupational training. There are several such occupational fields that could be set up in many high schools very profitably, and be very effective in the preparation of people for further vocational training.

The purpose of such a program would be three fold. First, it would attract and hold more students in school longer. Second, it would provide basic skills and knowledge as preparation for more specific occupational training later in the high school or after high school. Third, in the event the student did leave school after participating in this program, these basic skills and knowledge would enhance his opportunity to get a job, if he had to have a job.

We talk a lot about school drop-outs. It is a very serious problem. As I see it, Vocational Education can make a real contribution to keeping more students in school longer, but if some must drop out then Vocational Education can also contribute greatly to their employability when they do drop out. The City of Milwaukee in Wisconsin is a good example of what I'm talking about. In that city, they hold 92 per cent of all students through high school graduation, and I think it is because they have a very effective vocational program with programs suitable to meet the needs of all the people there. As a result, they hold students in high school longer. I think it would be tragic if we don't use this opportunity to capitalize on this "chance in a lifetime" to really progress in Vocational Education for our high school students. We know from past experiences that the great majority of youngsters will not find their way to college; whether they should or not, I don't know, but at least they have not in the past. It is becoming more and more important for young people who go out seeking work to possess some job preparatory training. We've talked a lot about college preparatory in the past, and it has been very important and absolutely necessary, but now we have got to begin to think about job preparatory for other people.

Now, the policies and regulations governing the Federal acts will enable us to do a lot of things along the lines presented here. I wish it were possible to have representatives from this group to meet with us in the writing and preparation of the State plan because I certainly don't propose to know all of the answers. I don't think anybody else does, and I would welcome the opportunity to seek the advice and counsel of school administrators who are operating the programs. They are your programs; they are not mine. But even so, I hope that we will proceed to get an approvable State plan now and that we will spend about a year working with you people in reviewing it, to later submit a substitute plan that will be in keeping with what you would like to see in it, insofar as it is possible to do so. After all, you are the people who are going to have to live with it in operation. It is unfortunate that a lot of people have the idea that Vocational Education in the high school is separate and apart from the rest of the high school. This has never been my idea, and I don't know of anybody in the State of Alabama who believes more strongly than I do that these vocational programs should be looked upon and dealt with exactly as they would be if you didn't receive a dime of Federal or state money. I would like to see the time come when you looked upon us as we come into your school system as visitors and as people who are there to help you to have the kind of program that you want. That is the only interest that I have in rendering any services that I can render.

Now, one matter of grave concern, I think, for all of us, may be the matching of these new funds. Insofar as I'm able to find out from the Office of Education we cannot reduce state or local expenditures that we have previously reported in order to match these new funds even though we are overmatched five to one under the old laws. If this provision remains, it will require new State and/or local money to match the increased money under the new Act. For next year it will be about $2,500,000, the next year $3,750,000, and thereafter about $4,750,000 each year, if the full amount authorized is appropriated. And any money that we do not match won't be saved, for it will be sent to other states. It won't lessen our federal tax bill one bit, either!

Now, one more thing I want to state in all earnestness is that the new Act makes a provision that this program that they are proposing is a five-year period of experimentation, after which there will be a re-evaluation of what we have accomplished. The one single criteria, regardless of what you may hear to the contrary, on which they are going to measure the program is, how effective has the program been vocationally? They are going to measure the effectiveness in terms of how well we have held the students we have enrolled. Is the holding power such as we have claimed it to be in the past? Most important of all, they are going to be looking at the percentage of those who complete vocational courses leading to specified employment, and at the percentage of students who were successfully placed in the job for which they were trained. After all is said and done these are the real measures of Vocational Education, and unless we establish and hold to sound standards, we could face acute embarrassment at the time of this evaluation. I, for one, believe that as a nation we have been engaged in Vocational Education for 47 years, and I, for one, believe that we can meet this challenge of re-evaluation at any time that anybody wants to make it.

ALABAMA PLANS AND PROGRAMS FOR VOCATIONAL-TECHNICAL EDUCATION*

Dorsey L. Haynes
Director of Opelika State Vocational-Technical School

The history of our vocational-technical schools in Alabama began in 1925 when the Alabama School of Trades at Gadsden was organized. Until 1947 this was the only type of institution providing trade and technical training in the state. Then in 1947, as a result of the Wallace Trade School Act when George C. Wallace was in the House of Representatives, a bill was passed that authorized additional trade and technical schools. The George C. Wallace School at Dothan was the first school to be constructed under the 1947 act. The Wenonah Negro Vocational School in Jefferson County was the second, while the Tuscaloosa and Mobile schools were the third and fourth institutions to be constructed under this act.

Then during the Patterson administration with funds from the $100,000,000 bond issue, the John Patterson Vocational Technical School was authorized and constructed in Montgomery at a cost of $1,000,000. The Tennessee Valley Vocational School at Decatur was also allocated $1,000,000 of this $100,000,000 bond program. A vocational trade school was authorized in 1960 for Negroes in Mobile at a cost of $465,000. During this same year (1960) a beginning was made in operating trade school facilities at Huntsville for the Negroes with a budget of $50,000 and the Gadsden School for Negroes with a budget beginning at $25,000. An extension of the Decatur school was established in Huntsville and then $90,000 was appropriated for the operation of an aviation technology school at Ozark which was built, constructed, and owned by the city of Ozark. During the 1963 regular session of the legislature an act was passed which made this institution a state school.

So at the present time Alabama has a total of seven white and four Negro technical-trade schools in operation. The total enrollment of these schools is approximately 3,800 students with approximately 1,200 students graduating each year. These state vocational-technical schools offer from five to twenty-three different courses at each school, and all combined offer training in some twenty-eight different occupations. These courses run from six months to two years in length and the graduates of these courses have very little difficulty in finding appropriate employment.

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*Combination of addresses made to the Spring Conference of the Alabama Association of School Administrators, Auburn University, Auburn, Alabama, April 27, 1964, and to the Conference on Meeting Educational Needs for Post-High School Age Youth and Adults, Auburn University, Auburn, Alabama, June 22, 1964, while Mr. Haynes was serving as Assistant to the State Superintendent of Education in Alabama.

At the present time those courses which have the greatest enrollment in the order of their popularity are business education and commercial subjects, practical nursing, radio and television technology, cosmetology, auto-mechanics, welding, refrigeration and air conditioning, electricity, and auto body repair. The industries of our state employ all of the graduates of these institutions. In many of our trades we have no graduates because there is such a demand for these occupationally trained people that the students are employed before they graduate. They are offered such good salaries that they stop school and go to work.

Now you perhaps want to know the difference between a trade and a technical education course. Our existing trade school directors could probably tell you more about this type of program than I could because they have been working more closely with it. However, somebody said that a technical course develops a skill that requires higher mathematics or physics and the theoretical knowledge of equipment and operation of industrial facilities. On the other hand, a trade skill might deal mostly with tools and muscles compared to the theoretical trained person.

An analysis of the existing trade schools in Alabama shows that the enrollment of each institution is supported by approximately 15 per cent of the high school age 16 or above population in the immediate vicinity. The average enrollment per instructor numbers approximately 15 students, and the average number of students per class taught is approximately 18 students. The attendance from various areas is proportionate to the distance from the institutions which we are presently operating. A decided increase in the number and interest of students is evident because of the present great demands made by industry to secure these skilled employees.

All of our technical institutions provide free transportation to all the students. I believe at the present time we have two institutions that have boarding students--the George C. Wallace School at Dothan has a few boarding students and possibly the one at Gadsden. I don't recall any others but maybe there are a few boarding students at the Decatur school.

The vocational trade and technical schools are perhaps very expensive institutions to equip and to operate. Also we are still having some difficulties in obtaining instructors in some of our technical education courses. The equipment that is necessary to operate and put into operation an average trade school department runs from $5,000 to $250,000. To keep the equipment up-to-date in the existing schools will require considerable annual appropriations. It is estimated during the next four years that $1,500,000 will be needed to keep the machine shops of the present schools properly equipped with modern machines. It is estimated that it will cost $100,000 to keep the electronics shops of the trade schools up to the maximum efficiency. It is estimated that it will cost $55,000 a year to keep the automotive shops in these schools up to date, $100,000 for diesel and heavy equipment shop operations, $55,000 for electrical shops, and varying amounts for all others. So you can see that the operation of these technical schools is quite expensive to equip and maintain.

The new institutions which were made possible by the legislative act last year by levying additional taxes on beer and authorizing a bond issue of $15,000,000 was passed after many bitter hours of filibustering on the part of the Senate and many different versions of bills were offered on the floor. Finally, during the special session which the Governor called for education, legislation passed authorizing the State Board of Education to locate the new institutions.

I would like to briefly go over the acts creating new trade and technical schools in Alabama as passed by our state legislature. Act No. 92 levies the revenue of 3½ cents on each twelve ounce bottle of beer and spells out how this tax is to be collected and divided. The tax will be collected by the ABC board and one-seventh of all the proceeds will go to each of the 67 counties on a monthly basis. Two-sevenths of all the proceeds of this revenue will go for the old age assistance benefits. Then the residue collected from this special fund will be deposited to the credit of the educational trust fund.

Act No. 93 authorizes Alabama's trade school and junior college authority. It lists the offices of this authority as consisting of the Governor who is president of the authority, the State Superintendent of Education who is vice-president, and the Finance Director who is secretary of the authority. Along with establishing this authority, the act describes the power of the authority, including the power to acquire and approve sites which must be donated by the local community receiving these trade schools and junior colleges. This act also establishes the machinery to allocate the money to each institution and describes what will happen at the end of the authority when it ceases to exist.

It is interesting to read in Act No. 93 that the number of students enrolled in trade schools and colleges supported wholly or partly by the state has increased greatly during recent years. Further increases in enrollments are anticipated because of the increased rate of birth, because of the increased need for skilled workers, and other factors. In order to meet these needs and provide residents of this state with the opportunity to receive adequate instruction in the arts and sciences and the useful skills of trade, it is imperative that junior colleges and additional trade schools be constructed, equipped, and operated. I wish to emphasize the point that this program originated in the minds of the laymen--it did not come from the school leaders of this state. Because of the need for junior colleges and additional trade schools, these bills were introduced for the purpose of providing these additional institutions.

The other act, Act No. 94, vested in the State Board of Education the authority and responsibility for the operation of these new institutions. In other words, at the completion of the construction of these institutions the junior college and trade school authority will cease to operate, and all the property and sites will be transferred to the State Board of Education for operation of the new junior colleges and trade schools. Since the passage of this bill the State Board of Education has designated the location of 15 new trade and technical schools.

The State Board of Education named a survey committee and this survey committee began immediately studying the state, analyzing job opportunities available for the youth, considering the programs of existing institutions, and other factors. This committee recommended five new institutions strategically located over the state. I don't know yet exactly what happened, but I believe at the present time we have some 15 new locations for trade and technical schools and about 11 new junior colleges as a result of this legislative act last year. Instead of building these institutions at different times, they plan to build a complete program at these different locations. As you can well see, the $15,000,000 bond issue wouldn't go very far in completing 15 new technical schools and 11 junior colleges. As it stands now, the State Board of Education has the responsibility to implement the program in a very limited way until additional money is made available.

The building authority has allocated the amount of money that has been set aside to put this program into operation. I would like to mention the location of the new trade and technical schools along with the amount to be allocated to each since there have been some discrepancies in the newspapers about this information. The law said that not more than $1,500,000 could be expended on any one school. This authority has allocated $15,000,000 to these locations ranging from $125,000 to rebuild one Negro institution to $1,000,000 for the trade and technical school to be located in Bessemer in Jefferson County.

Hamilton has been allocated $575,000; Childersburg $350,000; Opelika $500,000; Thomasville $375,000; Opp $350,000; Jefferson County $1,000,000 to be located in the Bessemer cut-off area; Selma $375,000; Evergreen $375,000; Anniston $575,000; Tuscumbia Tri-City area $575,000; Cullman $375,000; Eufaula $350,000; and Sumiton, $375,000. The Negro institution at Montgomery will receive $375,000 and the new Negro school at Tuscaloosa will receive $350,000. The existing trade and technical school at Decatur will receive $625,000 for a technical college in connection with their program; the Gadsden school will receive $600,000; the George C. Wallace School at Dothan will receive $600,000; and the Wenonah School for Negroes in Birmingham will receive $750,000.

At the present time these institutions are on the drawing board of the architects. The architects have been employed, and Mr. Ingram and I and other members of the State Department of Education have worked up a program with recommendations for consideration to begin these new programs in a limited way. Construction is expected to begin within 45 days on most of these institutions.

In addition to the 15 new technical schools, four technical colleges were authorized by the State Board of Education, but I haven't found out exactly what they plan to offer at these institutions yet. They are to provide a junior college program with the schools at Decatur, at the old Alabama School of Trades in Gadsden, at the George C. Wallace School at Dothan, and at the Wenonah Negro school in Jefferson County. As far as I know there has not been a complete program submitted for these new institutions, but the new trade school program is in the hands of the architect, and we hope that these institutions will be ready for beginning classes in the fall of 1965. We anticipate that we will have contracts for the beginning of these programs this fall. As it stands now there will be a vocational-technical school almost within walking distance instead of driving distance of all of the students and adults in the State of Alabama because when they are completed there will be a total of 26 institutions.

The status of these trade and technical schools has come to the point whereby someone must be concerned about implementing the program to determine what type of courses will be offered on the limited amount of funds which have been allocated for the construction of these buildings. The architectural fees must come from the amounts allocated and I quoted to you earlier. In other words, if you have a $500,000 allocation for a site, the architects' fees and the cost of administering the building must be included in the allocation. So you see that there is still a great need for finances to complete the new schools. Dr. Meadows, Governor Wallace, and the State Board of Education have seen fit to locate all of these institutions to blanket the state. I am sure they have reason to believe without a doubt that money will be available to complete these institutions and implement a high type program in each of these new institutions.

I think that the teacher training institutions of the state should be concerned to help qualify instructors to staff and equip these trade-technical schools. If you listen to some of our directors talk about what a hard time they have finding qualified instructors, you really understand what it would mean to say we anticipate difficulty in staffing many of the courses in these schools.

We should be concerned about where this will take us in the future to finance the operation and maintenance of these institutions. I think we have all been concerned and wondered if this new program would take money away from the minimum foundation program fund. I think if you take a look at the beer tax collections you will find that money will be available to continue to operate this program without taking any existing money away from the educational trust fund. Dr. Meadows supported this program after it was introduced because it did have provisions of self-support.

Then I think one of the great concerns of ours should be what are we as school administrators willing to do to help see that these institutions in our areas are made a success. Our school principals will have to be involved in the program, especially in the area of vocational guidance. I believe the record shows that only about one-fifth of our high school pupils ever enroll in vocational courses and yet what do we find these students doing. We say that we have a large per cent of pupils dropping out of school, but are we doing our part in seeing that these students stay in school. I think that we need to take a look at these trade and technical schools in connection with existing high school programs. Then I think that we should be very much concerned about working closely with the new directors to get these programs off to a good start.

There have been some studies already on the programs that are to be offered, but I would like to read part of a letter that I received from a personnel director of the Tennessee Valley Authority in connection with a concern of his in providing courses in these institutions. He said, "Here at TVA it is our conviction that we need in this area some type of apprenticeship and pre-employment training. We have observed that for years that the average high school graduate lacks the basic knowledge about common tools, basic mathematics, basic electricity, and knowledge of power tools, etc. We have been particularly concerned over the lack of knowledge when we have made selections for craft apprenticeship in chemical and power plant training programs."

We believe the trade school will provide a great service in this particular area. We also need a place for adults to take remedial courses in arithmetic, English, Algebra, geometry, and other high school courses. A large percentage of our unemployed people coasted through high school and many others have plain forgotten what they learned in basic courses. A chance to brush up would renew their confidence in themselves as well as make them more competent on the job. Maybe the trade school can provide help in this area. We think the trade schools should offer commercial subjects, such as typing, shorthand, bookkeeping, business English, and business mathematics. We believe that trade schools should offer this opportunity in day and evening classes for any worthwhile students who for various reasons might not be able or inclined to attend business schools and other colleges.

We foresee a need for a curriculum that would train students for what we call sub-professional engineering work. We have found that many engineers spend their time doing routine work. We should prepare students for employment with good solid courses in engineering drawing, engineering mathematics, engineering physics, fundamentals of electricity, etc. I think there is a trend throughout industry to conserve the professional engineering time for more technical work by shifting this more routine work to employees with certain types of pre-engineering training. Perhaps our trade school program should provide some technical training that would equip people for these jobs.

So industry is concerned about the programs that we have and I think that we should all be concerned and work on a cooperative effort in supplying the basic skills needed for our industrial state which we are now in and which we expect to become more industrial in the immediate years ahead.

The Governor is sold on the vocational-technical program. As you recall he offered the George C. Wallace Trade School Act in 1947 and saw it passed in both houses. This was the forerunner of the new type of program passed this last year. The Governor feels that without this type of program Alabama will not be able to attract industry because, as you know, industry needs and demands technically skilled people to run those industries. We are competing with North Carolina and many other southern states. Tennessee, I understand, is building 15 vocational-technical schools, while Georgia has completed about eight, and I believe they plan 15 or 18 additional programs.

We are also competing with industry when we think in terms of teaching salaries for the new vocational-technical schools for Alabama. We realize that these institutions will require considerable amounts of money to keep these programs going. At the present time the existing trade schools and the technical schools have an annual budget of almost $3,000,000 to operate and maintain them.

Differently from North Carolina, Georgia, and some of the other states, our vocational-technical program is strictly a state operated program through the State Board of Education. They do have local advisory boards on the local level, but the administration and operation comes through the state program. We are going to be faced with a shortage of teachers and instructors in these schools as we talked about this morning. I think that we are going to have to be concerned about changing the attitude of the image of people toward these new types of programs because I think we all agree that a good program will meet the needs of many students that we are now not reaching.

So we hope that the legislature will make possible additional money that is needed next session. We think we will have the money available. I understand the Governor would be interested in taxing beer some more and maybe hard liquor. The state legislature, I am sure, will go along with an increase in the taxes it takes to operate these schools because just about every one of the Senators and their districts have a new institution. They are going to be charged with the problem of raising new revenue to keep their institution going, so maybe it is political expediency that we have committees.

ALABAMA PLANS AND PROGRAMS FOR JUNIOR COLLEGE EDUCATION*

Ernest R. Knox
President of Northeast Alabama State Junior College

In Alabama we do not have the background in junior college education that they have in trade school education. We are starting pretty much with the law that brings about the junior colleges. This law states that because of the increased enrollments and to provide residents of this state with the opportunity to receive adequate instruction in the arts and sciences and useful skills and trades, it is imperative that junior colleges and additional trade schools be constructed, equipped, and operated. Mr. Forrester and I are a task force for the junior colleges. We have been working on some recommendations for construction, curriculum, and other phases of the program for these junior colleges to be presented to the State Board of Education.

We have kept in mind three things in the development of the junior colleges. First of all, the junior colleges should be a place for transfer students with a parallel program which should duplicate the program in the senior colleges and universities. The second thing is that the junior colleges should be a place where we have terminal education for people who wish some specialized or general education but who do not want to go on to college. Third, the junior colleges should have an adult program where people can become more culturally refined and can perhaps increase their vocational skills.

Now in thinking of this program we are trying to keep in mind four groups. The first group, of course, are the students. The students who come to the junior colleges will be those who, perhaps, in many cases would not be financially able to go to a senior college; therefore, we believe that the expenses should be kept to a minimum. Many of the students that come to us will be unsure of what they want to be or do; therefore, guidance and counseling will have a large place in this school. Others will come who have not done well in high school because of illness or some other reason and the junior college will provide a place where they can have a second chance for an education.

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*Address made to the Conference on Meeting Educational needs for Post-High School Age Youth and Adults, Auburn University, Auburn, Alabama, June 22, 1964, while Dr. Knox was serving as Consultant in Junior College Education in the Alabama State Department of Education.

The second group that we have discussed and thought about, of course, are the teachers. We have discussed having all of the administrative officers do some teaching in the school, especially when these schools first start. We believe that the people who teach in these schools should be primarily teachers and not be the people most interested in research. We believe that these teachers, along with the guidance counselors, also should have ability to help students find their place in life and should assist the students in deciding whether they should go on to college or seek other positions.

The third group that we are thinking about primarily is the community. We feel that this will be an opportunity to upgrade the cultural level of the community and that it may be a means of bringing industry to these local communities. Industry often looks first at the school's offerings before they will come into the community. Of course, we are keeping these things in mind and for that reason we want the industry in these communities to help us decide what the curriculum shall be.

The fourth and last group that I want to mention are the four-year college people. We have visited some of these colleges; we want them to know that we are here to cooperate with them and not to compete with them. We feel that more people will go to the four-year colleges because of having gone to those junior colleges. In fact, in one of the counties in Florida only seven per cent of the high school graduates were going to college before they established the junior college, but soon after, they had 52 per cent going to college. We believe, too, that because of a wider range of offerings that we will be a screening place for the colleges--as one man has said a staging area for the senior colleges.

So the first thing we are thinking of is more and broader opportunities for both youth and adults, and the second thing adequate guidance which will offer adequate educational goals to all of the high school graduates. We want these junior colleges to be adaptive to the needs of the local community, to have a minimum tuition charge, to provide outstanding guidance services, and to have a primary concern for the cultural, educational, and economic development of the local community.

CONFERENCE SUMMARY AND RECOMMENDATIONS FOR MEETING THE EDUCATIONAL NEEDS OF POST-HIGH SCHOOL AGE YOUTH AND ADULTS*

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The title suggests my assignment is a dual one and I recognize the assignment, but I want to spend considerably more time on the second phase, recommendations, than on the first, summary. If justification is needed for this distribution of time, it can be found in the quality of the presentations.

Dr. Wiegman gave an excellent address on the social forces that are shaping post-secondary education. While it may be difficult to predict the specificity of education in the days to come, one fact is inescapable; more and more of our youngsters will seek, and somehow we must provide, more than the traditional twelve years of formal education.

The California, Florida, and North Carolina stories were ably told by Mr. Wellman, Mr. Wattenbarger, and Mr. Eason. Examine the developments in these states carefully, for there is much to be learned.

From California I hope you learn the importance of adequate financial support from the state level as well as the value of having strong support from the university leaders. From Florida I hope you learn the value of carefully planning a state program for the orderly development of junior colleges and, perhaps more important, the value of carefully implementing the plan. North Carolina shows us what a state can do when it gets serious about wanting to improve its educational system. Steps taken by these and other states will fall into three categories: (1) steps desirable and possible in Alabama, (2) steps desirable but not possible in Alabama, and (3) steps that are not desirable for Alabama. Categorize carefully and implement intelligently.

Let's turn now to the second phase of the task, recommendations for the future. Again I am going to be a disappointment because I feel that we do not have enough information on which to make intelligent recommendations. The discussions for the past two days have been concerned for the most part with the HOW of post secondary education. Have the more fundamental questions of WHO, WHAT, and WHY been answered? I could suggest there is also a question of WHERE, but Ihave been assured that this is being taken care of by a higher power.

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WHO? The answer that every young man and woman must be given an opportunity to develop to the limit of his or her abilities serves only as a guideline and suggests many other questions. For example, what abilities are we talking about? Academic ability and what else? Assuming each of these abilities to be a continuum, what segment, if any, do we serve? Do we concern ourselves only with those who fall in the upper one-half as we have traditionally done, or do we seek another approach? In any normal distribution, approximately two-thirds of all persons measured will fall within plus and minus one standard deviation of the mean. Professor Norman Harris of the University of Michigan has referred to these as the middle order ability groups and has suggested that it is to these groups that the junior college must dedicate itself.

In addition to ability, we need to know about interests and aspirations of our future clients. Yesterday Dr. Wiegman quoted a well known statistic about the number of qualified high school graduates who do not attend college because of financial barriers. Based upon my own experience, I challenge this statistic, for I have never known a well-qualified youngster who could not attend the local public junior college because he couldn't find the money; I have known many who couldn't attend because they couldn't keep up their car payments and go to school. Are we obliged to provide low cost college education for youngsters who are not willing to make some sacrifices?

WHAT? What kinds of learning experiences are needed for persons who differ in so many ways? If we recognize the need for worthwhile experiences for young as well as old, for those with low verbal ability as well as for those with high verbal ability, for those who are highly creative as well as for those who are not so creative, and for those who differ in many other ways, what is the curriculum?

The comprehensive community college is usually described as a two-year college that offers for college age youth and adults programs for those who wish to transfer to senior institutions and subsequently work for a baccalaureate degree, and for those who wish to enter the labor market directly. A strong guidance program and some attention to community needs round out the generally accepted concept of the functions of this segment of education.

Many questions remain unanswered. In addition to the more difficult ones of program content, there is the problem of definition of the community. Is it the county of residence? Is it the area from which a majority of students are drawn? Or is it a larger region? Or can it be defined by geographical bounds? Assuming the community can be defined, what do we mean by meeting community needs? Are we talking about the needs of the physical community or about the needs of the young persons in the community? If there is a conflict, whose needs govern?

We talk a lot about the guidance program in the junior colleges. I believe it was mentioned yesterday that we ought to have a counselor for every 250 students. We jokingly say that if the junior college youngster doesn't have a problem, give us enough counselors and we can guarantee he will have. From what I see in the guidance-counseling area, I would vote to cut down the number of counselors rather than increase because these people are simply not trained to do the kind of job I think ought to be done. The typical high school counselor knows only enough about vocational guidance to insist that it doesn't take as bright a student to be an automobile mechanic as it does to be an engineer. The first time a youngster experiences difficulty with the academic program, he is shunted off to the vocational program.

Unfortunately, too frequently our junior colleges use the same approach. To the youngster with the unimpressive high school record we say, "Go across the street, buddy, you need to be in the vocational program." The words we use and the way we say them reflect our prejudice against the vocational-technical program. "Let's see, you flunked English and history last time; maybe you ought to go into the vocational program." This approach bothers me, for I want the person that fixes my automobile to know what he is doing because my life is in his hands when I drive a car he has worked on. And I want the nurses who graduate from the two-year nursing programs to be sharp because they do more for me when I go to the hospital than the doctor. I could give other illustrations but they are not necessary. The simple truth is that we are not getting the caliber of people we want in the vocational-technical programs with the counseling programs we now have.

It was suggested yesterday morning that we have increased the percent of our labor force involved in the management and the professional areas. At the same time the percent of the labor force involved in unskilled areas has decreased. But the greatest growth in terms of percent of the labor force has been in the middle order tasks--some of the service areas, the technical areas, and the highly skilled areas. This is where the greatest growth in terms of percent of the labor force has taken place and this is where it is projected that the greatest growth will continue to take place until 1975. Isn't the message for the junior colleges relatively clear? Preparation of persons with middle order abilities to do the middle order tasks.

WHY? A more fundamental question, perhaps, than either WHO or WHAT is the question WHY. Why post-secondary education? We have had some statements that indicate it is a good investment for both the individual and society. But what is the evidence? I like to quarrel with the people who present the sort of information that says, "Look what one additional year of schooling will do for you in terms of life income." Admittedly there is a relationship between the number of years of education and the amount of income that a person earns in a lifetime, but to say that this is a causal relationship is a fallacy. The evidence is not conclusive and to represent post-secondary training as a good investment for the individual in terms of cash return is just not "cricket."

A better case can be made for investment in education by society by making a comparison of the standards of living of societies that have heavily invested in education to societies that have not. But results should be interpreted with caution, for there are many variables that cannot be controlled. Then too, it is easy to see that a society in which each member possessed a Ph.D. degree could not possibly offer the maximum return on the investment in education. It is an optimum rather than a maximum level that we seek.

To value education only in terms of monetary return either to the individual or to society is to cheapen it. The other values with which you are all familiar are inherently more valuable, and it is upon them that we should build our sales pitch.

I realize I have dodged the issue of recommendations for meeting the educational needs of post-high school age youth and adults in Alabama. I wish I could say that the solution to your problems would be a comprehensive junior college system; or that there should be an expansion of your technical or trade-technical schools; or that the expansion of the university centers would solve your problems. Frankly I don't know; maybe you need to expand all three. But I am sure that as you give careful attention to the questions of WHO, WHAT, and WHY, you will find the correct answers to HOW.

PROBLEMS CONFRONTING ALABAMA IN MEETING THE EDUCATIONAL NEEDS FOR POST-HIGH SCHOOL AGE YOUTH AND ADULTS*

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Emphasis on the great need for additional post-high school educational opportunities in Alabama is a thread running throughout this conference. The much heralded cultural revolution with all its demands for additional education of higher quality has been stressed, as has been the importance of providing continuing programs of education for adults in order that they may be self-sustaining and contributing citizens of their communities, states, and nation. The fact that more and better education will be required for all in the world of tomorrow has been well documented.

Alabama has been slow in offering adequate post-secondary education programs for her citizens. Only about one-third of the high school graduates in the state go on to further formal schooling. Most of these enroll in an institution of higher learning where they pursue a degree program. Many drop out before completion of such a program. The percentage of adults in Alabama who are college graduates is among the lowest of any state in the Union. The percentage who actively pursue any type of post-secondary education is also low. The median grade achievement level of the adult population is among the lowest in the nation. The percentage of students who never finish high school is appalling. These statistics emphasize the great need for a comprehensive educational improvement program for all youth and adults in the state.

The newly created public junior college system can be one means of achieving the needed educational advancement. The extensive expansion of the State vocational-technical education program is another means. Together the junior college system and the vocational-technical school system will add an important dimension to public education in the State.

Changes and improvements in any aspect of our society always raise problems and issues which must be faced. The new phase of the educational system of Alabama poses a number of important problems and issues which will require attention as the new system gets underway. Among these problems and issues are the following:

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1. What programs will be offered by these new institutions?

The junior college movement, while not new, is now growing rapidly in this country, as has been pointed out in this conference. Some junior colleges concentrate on an academic program designed to prepare students for entrance into senior colleges. Other junior colleges stress comprehensive programs which are designed to meet as nearly as possible all of the post-secondary education needs of the population they serve which are not already being met. These institutions offer academic, vocational-technical, and adult education programs. We have yet to determine whether or not the Alabama system of junior colleges will offer the comprehensive type program or primarily the academic program.

A similar problem exists with respect to the vocational-technical schools. How can they offer preparation in the fields of employment for which there will be the greatest demand for personnel? The necessity of being selective in curricula is obvious. Another problem is at what level will this preparation be offered? Should the vocational-technical schools accept only high school graduates? If so, preparation offered can be of a materially higher order than if high school dropouts are the main population from which students are drawn. A third most important curriculum issue is whether the vocational institutions will concern themselves only with job preparation or with general education and citizenship responsibilities also. There are many who believe a curriculum which has broader goals than developing job skills is necessary even for the best development of vocational proficiency.

2. What will be the quality of programs offered by these new institutions?

In the long run how good these institutions are will determine their contribution to the state. The quality of an educational institution is not easy to determine. The establishment of new institutions provides a real opportunity to build quality into their programs from the beginning. A complex array of factors will determine how well this is done. Among these factors are: the administration and control of the institution; basic facilities such as buildings, laboratories, libraries and equipment; size and competence of staff; level of financial support; and dedication of the staff to achievement of purposes served by the institution. Poor quality will not assist Alabama in bridging the gap between present education and education needed for tomorrow. Some aspects of quality are singled out for further comment in the succeeding paragraphs.

3. What levels and kinds of competence will the staffs possess?

The shortage of adequately prepared professional personnel in education is already extremely serious and is becoming more aggravated each year. An initial major problem of each new institution will be the recruitment and induction of a faculty to offer the program of the institution. Too much cannot be said concerning the importance of carefully selecting all personnel for these institutions. An extensive array of competence is needed by each school which includes administrative, supervisory, counseling, teaching, clerical and service personnel. Developing newly formed faculties into effective units will be an early task of each institution.

4. How will the new institutions be administered and controlled?

In some states the junior college system is part of a system of higher education; in other states it is an extension of the public schools, sometimes under the state board of education, sometimes under the local school district, and in some cases a combination of local school districts. Present provisions for both junior colleges and vocational-technical schools in Alabama makes them a part of the public school system directly under the State Board of Education with the State Superintendent of Education being the chief administrative official. No provision has been made for local boards of education or local school systems to have anything to do with the administration and control of these institutions. They are entirely separate from existing school districts. The heads of these institutions are responsible directly to the chief state school officer and through him to the State Board of Education. These institutions are therefore removed administratively from the geographical areas they serve. Whether or not this is the best system will depend on how well it works. The task of making this plan work lies ahead.

5. What is the best way of financing these institutions?

Various patterns of providing needed funds for such institutions have been tried ranging from state support to local support. A combination of state and local support offers much promise. The current plan in Alabama is for both the junior colleges and vocational-technical schools to receive all public support from the state. Fees from tuition charges will augment this support. Whether or not some partnership concept involving local as well as state support, somewhat along the lines of the Minimum Foundation Program, would be a better plan is an unanswered question.

6. How accessible will these institutions be to the students whom they are to serve?

Presumably, an institution is best located when it is most accessible to the largest number to be served. The statement has been made from time to time that the network of junior colleges and vocational-technical schools covers the state so well that any person in the state will have easy access to one of the institutions. Bus transportation will be provided. Present locations of both junior colleges and vocational-technical schools can hardly be changed. While each is in an area in which there is a distinct population to be served, there remains a considerable part of the state which is not easily accessible to either type of school. The creation of any additional institutions should be based to a considerable degree on this fact.

7. What will be the relationships of the post-secondary institutions to high schools, four-year colleges, and other institutions?

Both junior colleges and vocational-technical schools should establish close ties with the high schools in the interest of effective articulation. High school students should be fully informed about the opportunities provided by the junior colleges and the vocational-technical schools. A continuous exchange of information among these institutions and the high schools is essential. The high schools need to know of the progress their students make in the junior colleges and the vocational-technical schools. In addition, the latter institutions need to have as full information as possible on the previous educational work of the students they admit. Undoubtedly, some joint curriculum planning and evaluation is important.

Establishing and maintaining productive relationships between the junior colleges and the senior colleges is extremely important. Those students who plan to enter a senior college need to know what is expected of them in the institution of their choice. Curricula of the junior colleges should be coordinated insofar as possible with senior college curricula in order to minimize loss of credit by transfers. This is a reciprocal process which should be mutually beneficial.

The inter-relationships of the problems and issues outlined above are obvious. Achieving quality programs in the new institutions is dependent to a large measure on how well these problems and issues are resolved. It goes without saying that the new dimension now being created in Alabama's public education system can contribute in enormous ways to the social and economic advancement of the state.